Server Application

ACTi NVR

v2.0 SR1

User's Manual

www.acti.com

ACTi APP-2000

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1. Overview

Introduction

This material covers ACTi NVR overview on the overall framework, architecture, deployment and functions.

This section introduces ACTi NVR functionalities, architecture and the relationship between modules, so that user may have better understanding how to fully utilize its functions and deploy with right solution

Application Modules

ACTi NVR Server is consist of following application modules: ACTi NVR Server, ACTi NVR Workstation, ACTi Web Client and ACTi Utility suite.

ACTi NVR Server

ACTi NVR Server is consist of Win32 Service, running in the background of the operating system. ACTi NVR Server's configuration is done by ACTi NVR Workstation or ACTi NVR Setup.

ACTi NVR Server Components:

Icon	Name	Description
	`ActiveEventManager.exe`	Event handling and management, running as Win32 Service
	`ActiveScheduleService.exe`	Scheduler handling system and recording schedules, running as Win32 Service
	`ActiveServiceManager.exe`	Service manager manages ACTi NVR Server's services, acting Watch Dog. Service Manager will starts other Win32 Service if those services are down. Running as Win32 Service
	`ActiveStorageManager.exe`	Storage manager manages many hard-disk capacities in the system, running as Win32 Service
	`ActiveStreamingService.exe`	Streaming engine handles

ACTi NVR Workstation

ACTi NVR Workstation is consist of ActiveMonitor, ActivePlayer, ActiveMap and ActiveSetup. ACTi NVR Workstation can be installed in the same machine as ACTi NVR Server or installed and running on another computer and control different ACTi NVR Server.

ACTi NVR Workstation Components:

Icon	Name	Description
	`ActiveMonitor.exe`	Live view, PTZ, IP Joystick, system log monitor, event panel, Pre-defined layout, Tour
	`ActivePalyer.exe`	Archive player, synchronous playback, snapshot viewer, file export
	`ActiveMap.exe`	Map viewer, tour
	`ActiveSetup.exe`	System, camera and map setup

ACTi NVR Web Client

ACTi NVR Web Client is running on web browser and does not have to install any program on local machine.

ACTi NVR Workstation Components:

Icon	Name	Description
	`IExplorer.exe`	Live view, PTZ, IP Joystick, system log monitor, event panel, Pre-defined layout, Tour Archive player, snapshot, synchronous playback, file export Map viewer System and camera setup

NOTE: ACTi NVR Web Client only supports Microsoft Internet Explorer v6.0 and v7.0.

ACTi Utility Suite

ACTi Utility Suite is consist of IP Utility, Streaming Explorer, Archive Player, Backup Wizard, Media Converter.

ACTi Utility Suite Components:

Icon	Name	Description
	`IPUtility.exe`	Search and manage ACTi devices, firmware upgrade, configuration backup and restore
	`Explorer.htm`	Web browser application to configure PTZ settings.
	`ArchivePlayer.exe`	Standalone archive player, create snapshots, display time code on the video window directly. Able to play **`.RAW`** and **`.MP4`** format
	`BackupWizard.exe`	Backup and restore ACTi NVR v2.0
	`MediaConverter.exe`	Converts **`.RAW`** data format to **`.AVI`** format
	`FFDShow.exe`	MPEG-4 DirectShow filter. This is necessary if user wants to play **`.AVI`** file with Microsoft Windows Media Player.

Architecture

The role of ACTi NVR Server is a non-stop Win32 Service connecting to IP cameras and devices; while ACTi NVR Workstation and ACTi Web Client connecting to ACTi NVR Server to operate.

Single Site Deployment

With single site deployment, cameras are all located in one site, NVR Server and NVR Workstation can be run at the same PC machine as well; NVR Web Client can be executed on any other machines that may connect to the NVR Server.

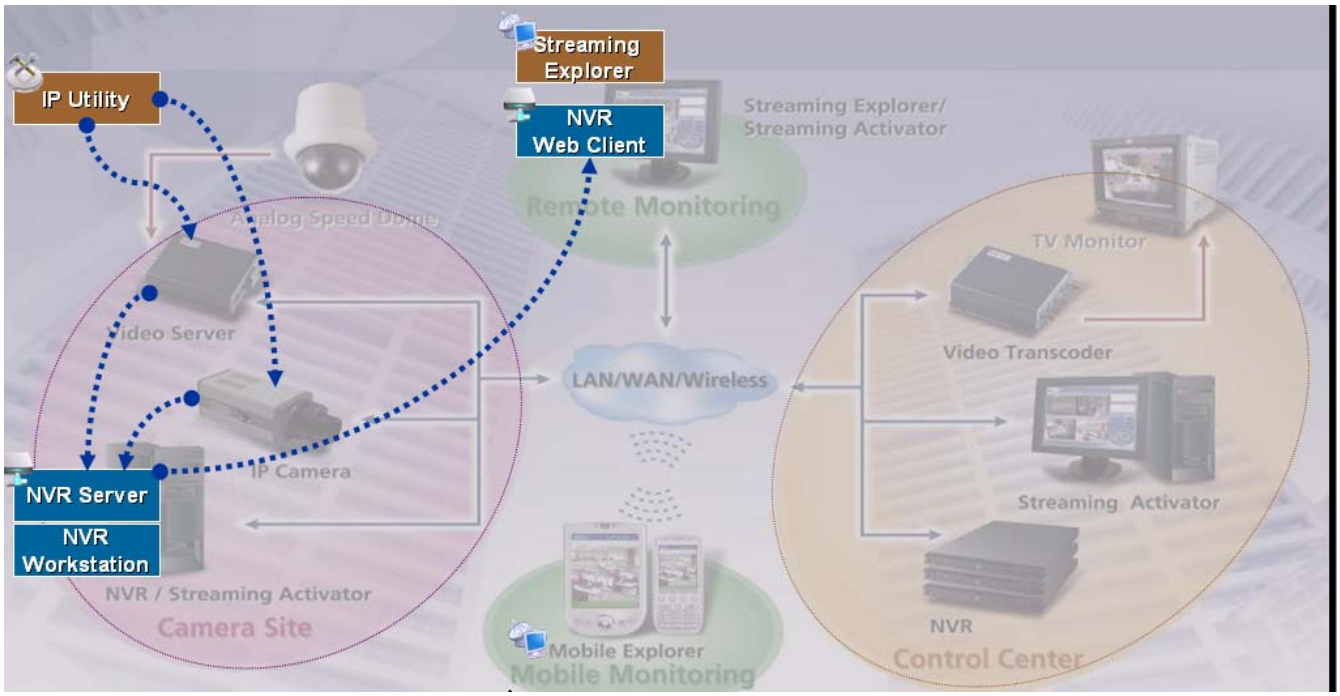


Figure 1-1 Single Site Deployment

Multiple Site Deployment

When there are multiple sites with camera deployments, and server-to-server backup is requiremed, then user need to deploy multiple site configuration.

With multiple site configuration, user may setup ACTi NVR Server on the camera sites, and setup ACTi NVR Server on the Control Center site and connecting to other ACTi NVR Server on the camera sites; and hence backup cameras from camera sites to the NVR Server in Control Center site.

ACTi NVR Workstation.may connects to different NVR Server on different site with IP address specified.

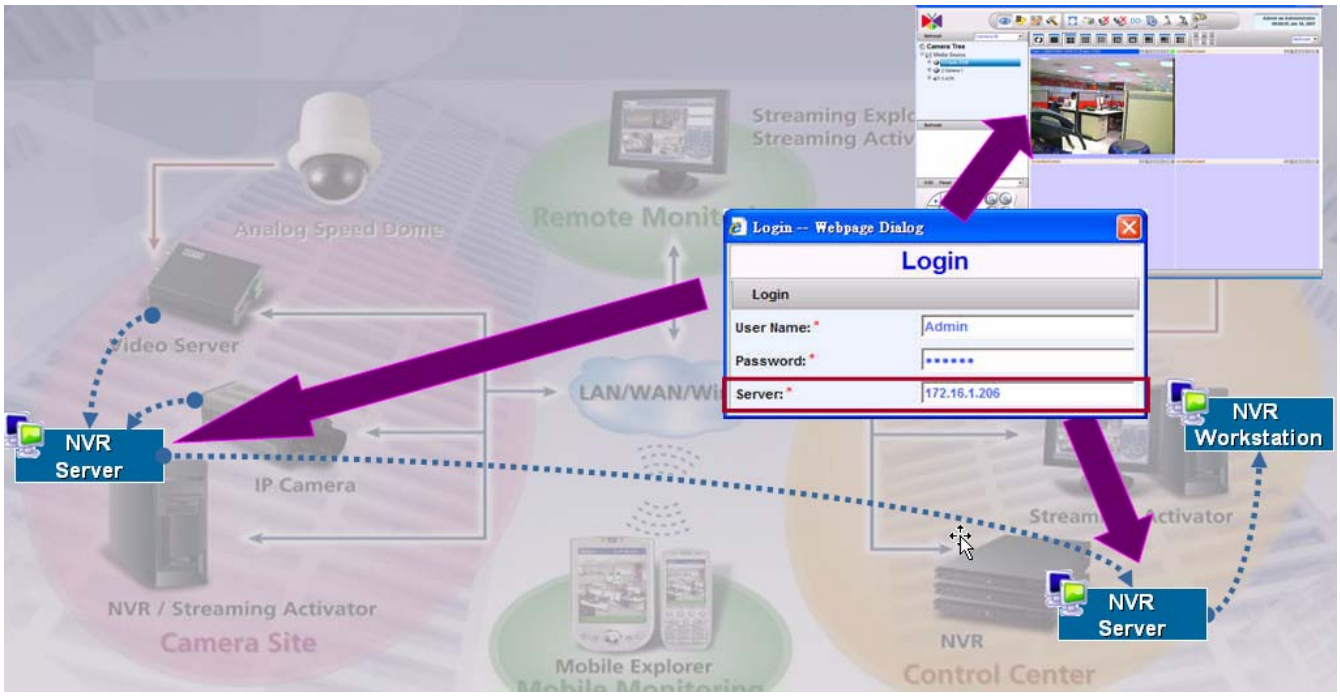


Figure 1-2 Multiple Site Deployment

System Requirements

Supported Operating System and Browser

Supported Operating System:

Operating System	Comments
Windows XP	Windows XP SP2 or most updated patch
Windows 2003	Windows 2003 Server, WSS 2003

Supported Browser:

Operating System	Comments
Microsoft Internet Explorer v6.0	IE 6.0 with most updated service pack
Microsoft Internet Explorer v7.0	IE 7.0 with most updated service pack

NOTE: Windows 2000 and Windows Vista series are not tested.

Recommended PC Specification – 16 channels

Supported PC Specification with 16-channel:

Item.	Specification
CPU	Intel Core 2 Duo 2.4 GHz
Memory	1 GB
HDD	250 GB

Recommended PC Specification – 32 channels

Supported PC Specification with 32-channel:

Item.	Specification
CPU	Intel Core 2 Duo 2.66 GHz
Memory	2 GB
HDD	250 GB

Recommended PC Specification – 48 channels

Supported PC Specification with 48-channel:

Item.	Specification
CPU	Intel Core 2 Quad 2.66 GHz
Memory	4 GB
HDD	250 GB

Recommended PC Specification – 64 channels

Supported PC Specification with 64-channel:

Item.	Specification
CPU	Intel Core 2 Quad 2.66 GHz
Memory	4 GB
HDD	250 GB

NOTE: AMD chip and X64 series are note tested.

Keyboard Shortcuts

ACTi NVR v2.0 supports keyboard shortcuts to increase security operator's productivity. These keyboard shortcuts apply to all applications, including Active Monitor, Active Player, Active Map and Active Setup.

Keyboard Shortcut	Description
F4	Hide / show left panel
F7	Create snapshot
F8	Toggle start / stop tour.
F11	Toggle stretch to video window function
F12	Toggle full-screen mode
ESC	Cancel full-screen mode; return to normal mode. This function key only valid under full-screen mode

NOTE: When running ACTi NVR Web Client, some shortcut key does not work.

Technical Support

Please refer to following mechanism to contact with ACTi:

E-Mail: **customer.service@acti.com**

MSN Messenger: **customer.service@acti.com**

When contacting ACTi Technical Support, please provide following information:

1. ACTi NVR version number: Please refer to **Check Version** section for detail
2. ACTi Devices Model Number and Firmware Version
3. ACTi NVR log and database information: Please use Backup Wizard to backup the database

What’s New in v2.0

System Enhancements

The following lists the enhancements in current version

1. Supports 64-channel with D1@30 FPS with 3 Mbps
2. Tree directory
3. Client / Server architecture
4. Supports NVR Server, NVR Workstation and Web Client

Active Monitor Enhancements

The following lists the enhancements in current version

1. Video layout mode supports 1, 4, 6, 8, 9, 10, 16, 25, 36 split window mode
2. Supports full screen mode; the video layout is displayed in full-screen mode
3. Tree Display Panel: the user may use drag-and-drop to drag a video source to the layout manager for preview
4. Patrol mode: Switches and displays each preview window accordingly. Pre-defined layout can be set to patrol mode as well
5. 2-Way Audio: Supports 2-way audio. User may have 1-to-1 speak function or 1to many audio broadcast to multiple devices at the same time
6. Create Snapshots: Create snapshot on the fly and as an event index for search later on
7. Advanced Preview Mode: Maximum 36-channel preview at the same time with different frame rate adjusted automatically
8. Layout Manager: Setup pre-defined video layout to group certain cameras in the same layout. Layout manager can be displayed in full-screen mode.
9. Hot-spot Window: The channel with an event will be switched to the hot-spot window.

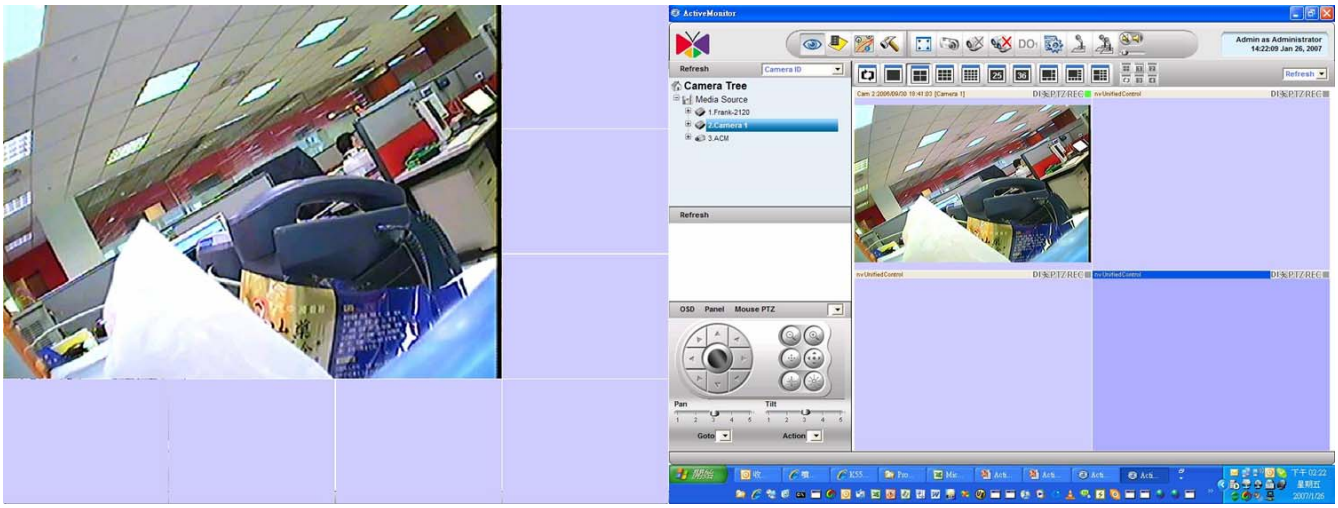


Figure 1-3 Dual Monitor – Live View + Live View

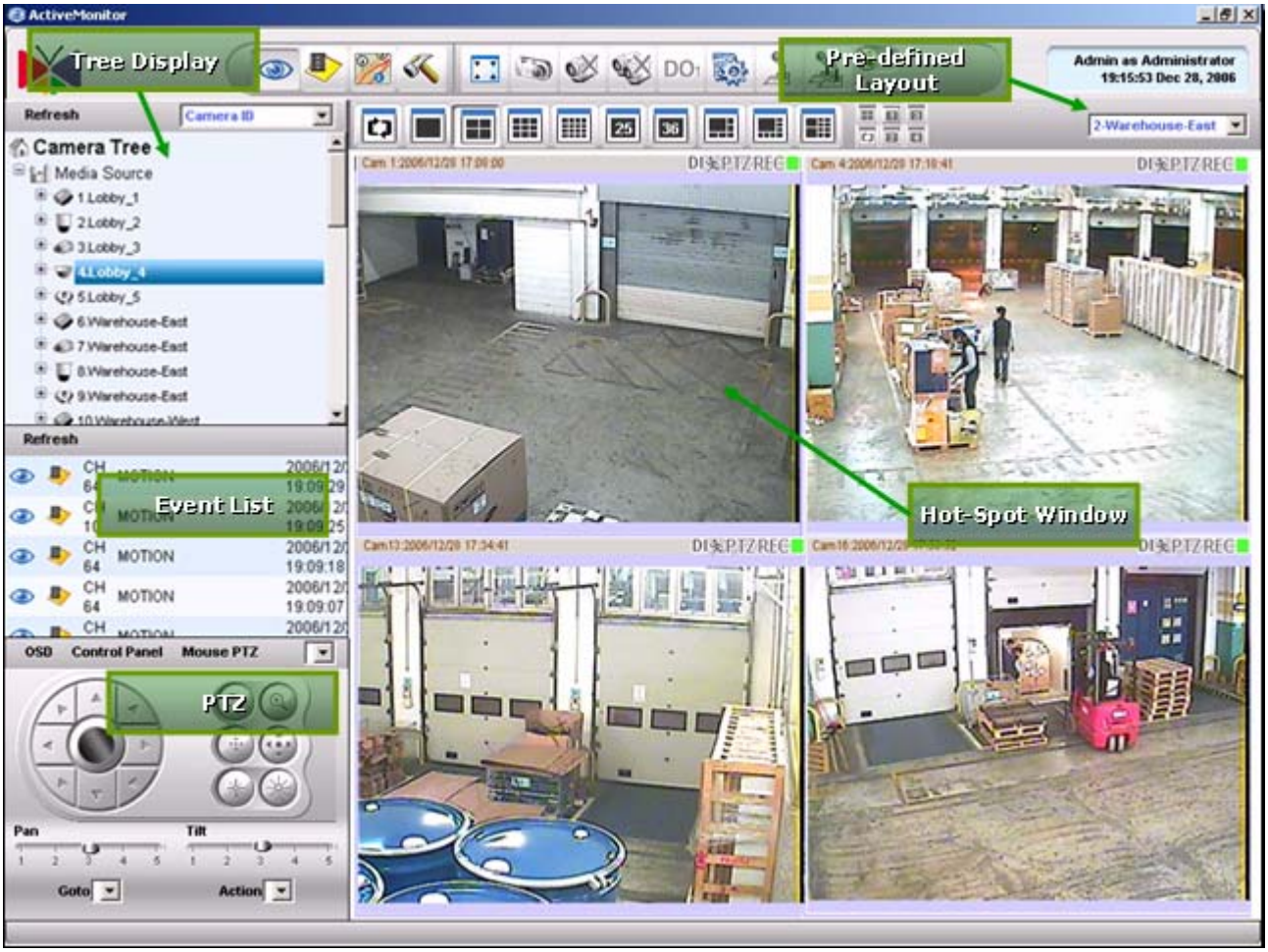


Figure 1-4 Active Monitor Features

PTZ Control Enhancements

The following lists the enhancements in current version

1. PTZ Control: Manages PAN, Tilt, Zoom operation with speed control
2. Protocols Supported: Pelco-P, Pelco-D, Dynacolor, Messoa, Lilin, Dynacolor, Samsung, Kampro, Sony Visca, Panasonic protocol supported
3. Preset Position: Maximum 32 preset positions supported
4. PTZ Patrol: Patrol preset positions with user-defined dwell time
5. Expandable PTZ Command: User-defined PTZ command to support additional PTZ protocols
6. Mouse PTZ: On-screen 8-direction PTZ with mouse operation. Full-screen mode supported.
7. IP Joystick on PC: Connects joystick on the PC via USB port to control speed dome directly
8. Control Panel on PC: Connects control panel on the PC via COM port to control speed dome directly

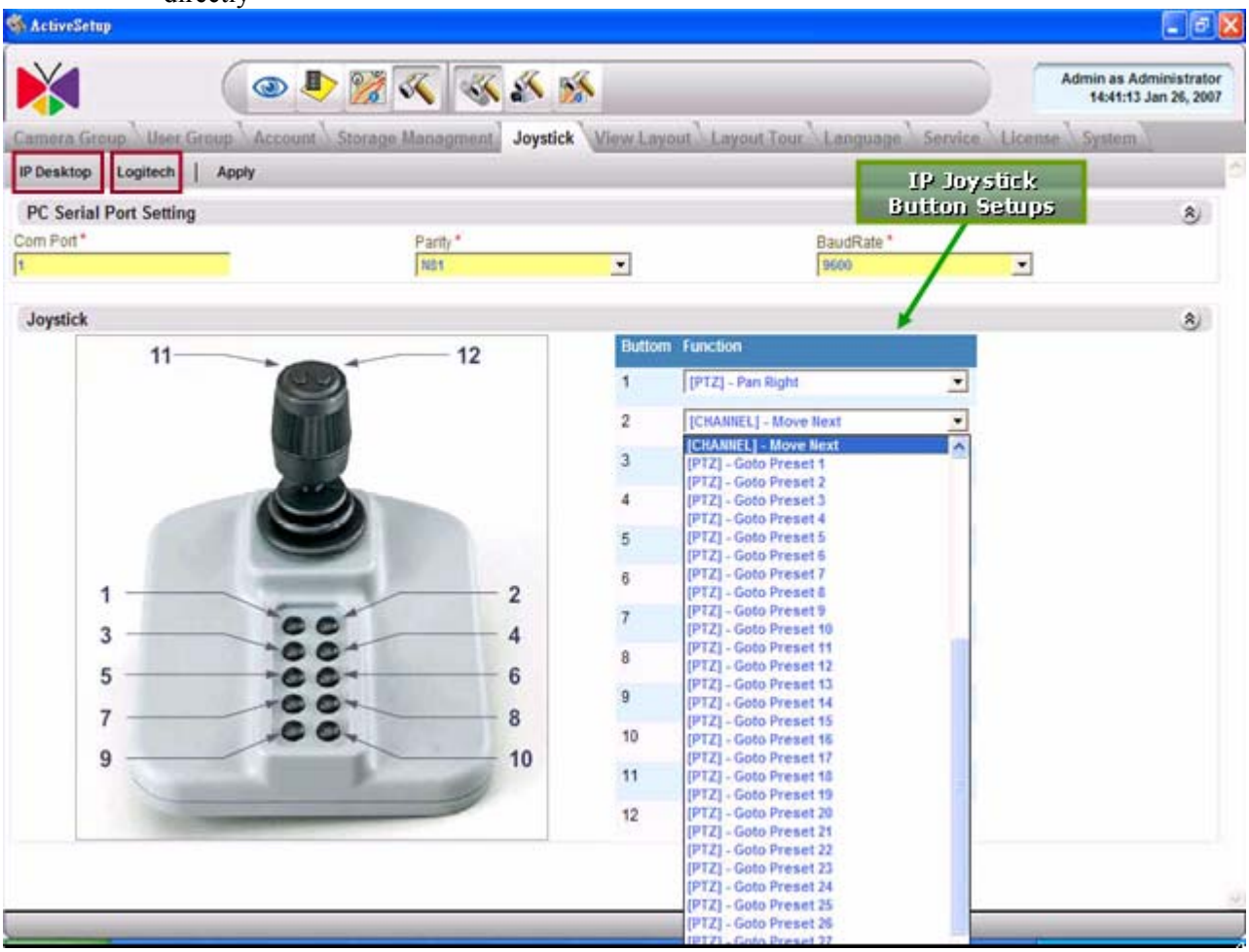


Figure 1-5 USB IP Joystick Support and Customization

Event Manager Enhancements

The following lists the enhancements in current version

1. Event Types: Handles motion detection, alarm, video loss, network disconnect events
2. Trigger Digital Output: May trigger digital output when an event occurs
3. Hot-spot Window: Activate and switch the channel with event to the hot-spot window. The original video in the hot-spot window will then be switched over
4. Pop-up Window: Mini-preview window will be pop-up when event occurs. Pop-up window will be dismissed when user-defined dwell time elapsed
5. E-Mail Notification: E-Mail notification with snapshot image
6. FTP Notification: FTP captured snapshot to the FTP server
7. Play audio file: Play user-defined audio file or beep on the machine
8. Operate PTZ Control: A triggered event may request another channel to execute a PTZ Goto Preset position command
9. Execute Command: User-defined execution command will be executed

Recording Enhancements

The following list the enhancements in current version

1. Format: Supports standard 14496-2 MPEG-4 video+audio format. Compatible with FFMPEG, XviD, DivX
2. Recording Mode: Supports schedule recording, alarm recording and motion recording
3. Pre-event Recording: User-defined time period to record before a certain event occurs. Maximum 30 seconds.
4. Post-event Recording: User-defined time period to record after a certain event occurs. Maximum 2 hours.
5. Number of drives: Supports up to 23 drives in one single machine
6. House Keeping Methods: Supports Keep certain days, recycle recording and Keep Total Space methods.

Active Player Enhancements

The following lists the enhancements in current version

1. Time-based Search: Search video clips with date, time, channel
2. Event Search: Search motion detection, digital input, snapshot event with specified date, time and channel
3. Snapshot Viewer: Preview on snapshot created and link to archive player
4. Status Event Search: Search events on video loss / recovery, network disconnect / reconnect, user login / logout, database log with specified date, time and channel
5. Archive Player: Stand-alone archive player
6. Player mode: Play, Pause, Stop, Fast Forward, Fast Rewind, Play Backward, Play frame-by-frame, 1 / 2 / 4 / 8 speed control
7. Create Snapshots: Create snapshot images on-the-fly and can be searched as an event
8. Export Video: Export a MPEG-4 raw data file into a AVI file
9. Record while Playback: Recording to MPEG-4 raw data file while playback a file. This function is useful to extract part of a video clip to another archive file.
10. Synchronous Playback: 4-channel synchronous playback at the same time

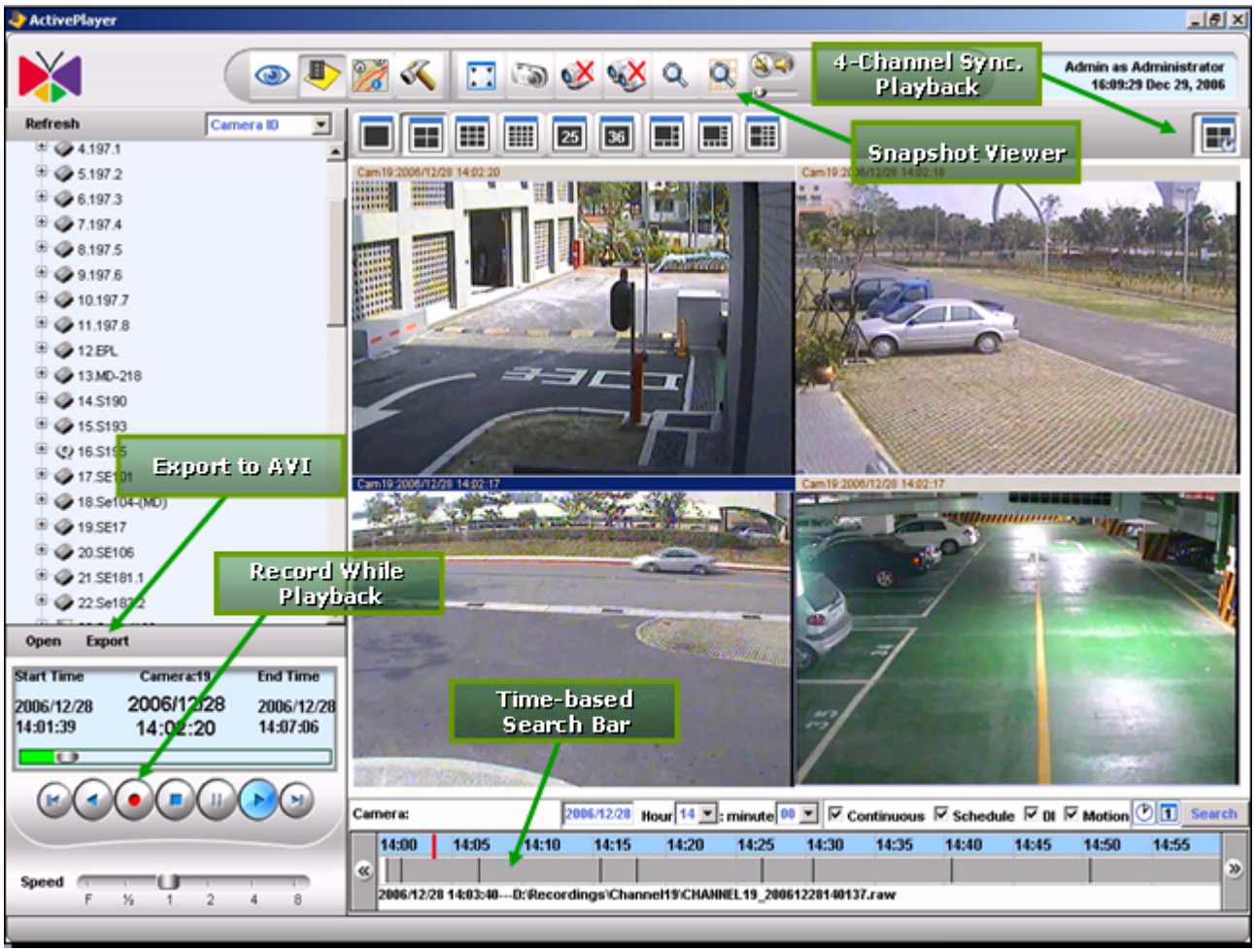


Figure 1-6 Active Player Features

Active Map Enhancements

The following lists the enhancements in current version

1. Map Manager: Map configuration and management
2. Map Monitor: Creates alarm when an event occurs on a certaion camera in Map
3. Preview-all Mode: With this mode, all cameras in the associated map will be displayed with QCIF@1FPS preview. When double-click on the preview window, the original video window will be brought up with its original resolution and frame rate
4. Map Patrol: Maps can be patrolled and displayed one-by-one with user-defined dweel time.

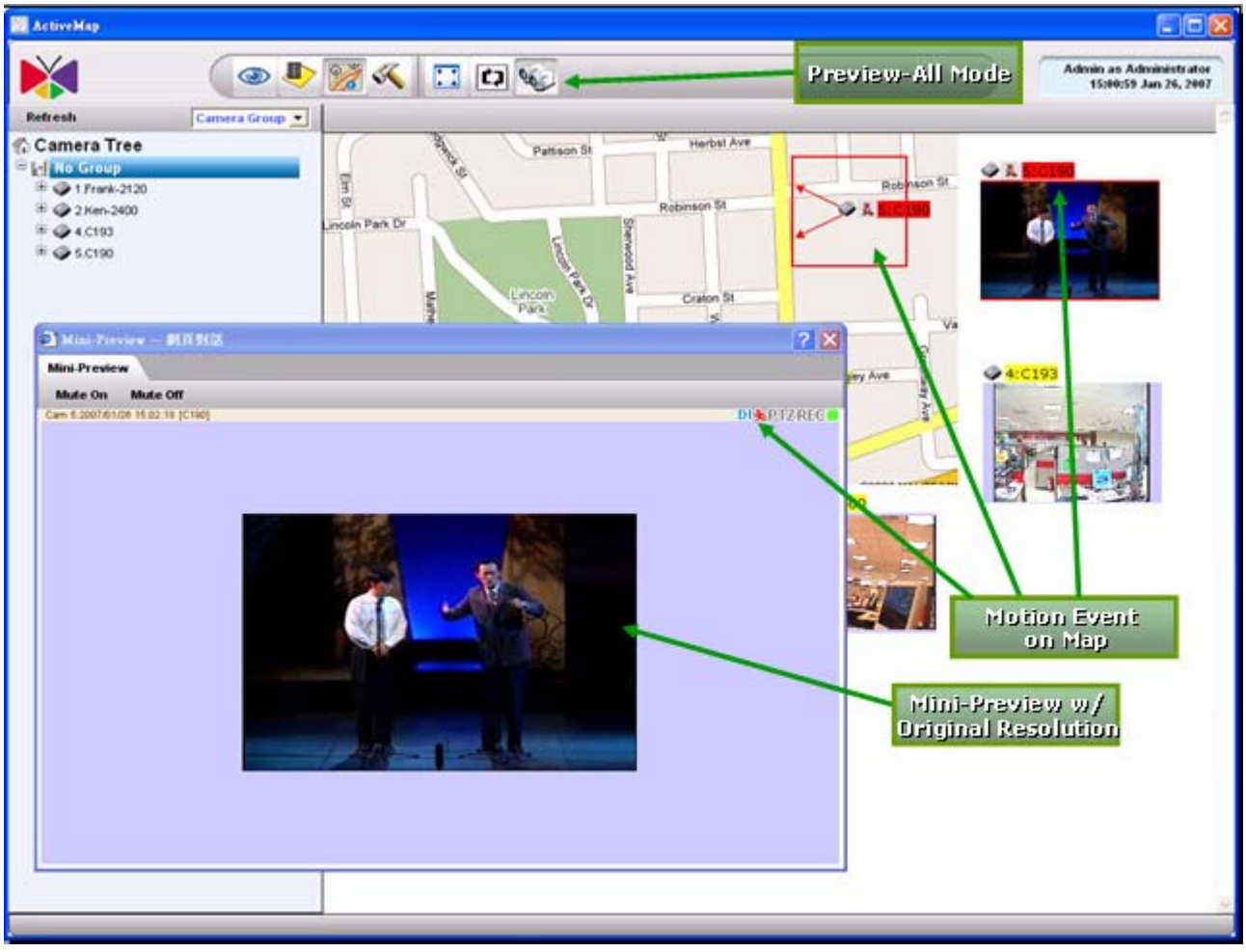


Figure 1-7 Active Map Features

NVR Web Client Enhancements

The following lists the enhancements in current version

1. Remote Preview: Supports 1, 4, 9-channel preview
2. Remote Playback: Supports 1, 4, 9-channel playback mode and playback operations.
3. Remote Map: Runs map on Web.
4. Remote Setup: Functionalities are the same as ActiveSetup.

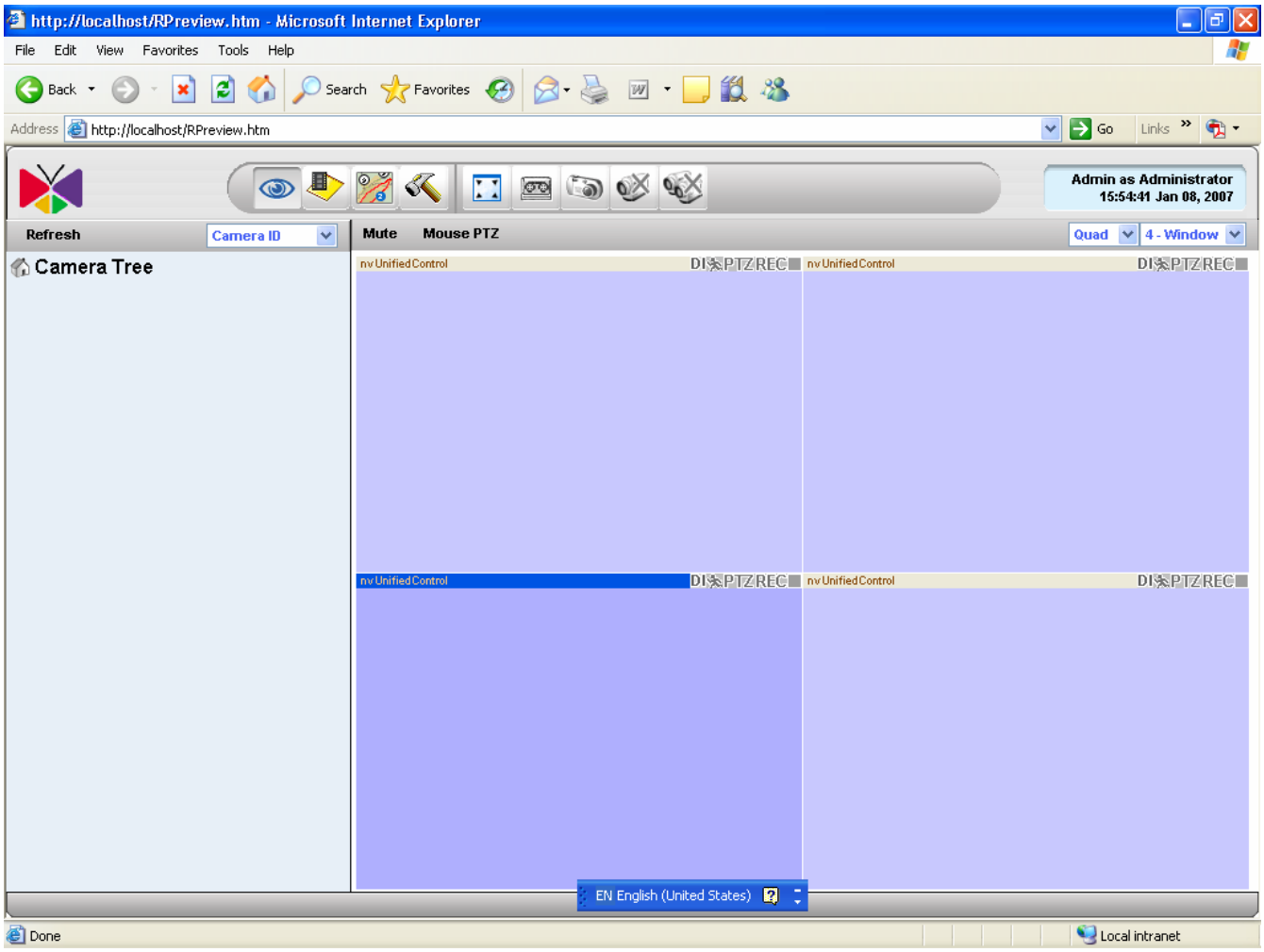


Figure 1-8 NVR Web Client Features

What's New in v2.0 SR1

System Enhancements

The following lists the enhancements in current version

1. Multicast: Supports multicast connection
2. Fixes VGA resolution issue. When live view on VGA resolution with firmware A1D-220-V3.03.04-AC, the video image will have wave effect on the video.
3. Fixes different frame rate setting. User may now set different frame rate for live view, record, event record, and remote connection.

User Interface Enhancements

The following lists the enhancements in current version

1. Tree User Interface: User may click on icon or camera name. When mouse cursor move over tree icon or camera name, the cursor will change to a click cursor
2. Updated Language: Sweedish, Simplified Chinese, Traditional Chinese, Japanese

Active Monitor Enhancements

The following lists the enhancements in current version

1. Fixes Event Manager issue. DI event triggers pop-up window does not work.

PTZ Enhancements

The following lists the enhancements in current version

1. Fixes control panel via serial port issue. User may connect analog control panel via serial port (RS-232) and operate correctly
2. Fixes Dynacolor PTZ protocol hangs issue.
3. Fixes CAM-6200 adjust focus issue.
4. Fixes remote mouse PTZ on CIF and QCIF resolution

Active Setup Enhancements

The following lists the enhancements in current version

1. Search and Add: When user click Search and Add button, all devices added to NVR will be executed auto-detect to get correct camera information accordingly
2. Add support to auto detect via Streaming Engine
3. Add wrong camera date/time notification. This is done in camera setup and live view. If the camera date/time is 10 days older than current PC date/time, then a message will notify user, and user may click to synchronize the date/time in camera firmware
4. Fixes recording setting issue. When a camera is deleted, the recording setting will not be removed accordingly

Active Player Enhancements

The following lists the enhancements in current version

1. Fixes Export AVI issue. Export AVI file will fail (100 MB size, slow motion, and fast motion) under some frame rate mode
2. Fixes Active Player linkage to Active Map issue. When clicking Active Map under Active Player interface, it does not work

NVR Web Client Enhancements

The following lists the enhancements in current version

1. Add pre-defined layut in NVR Web Client. Only display the pre-defined layout with layout window smaller than 9 windows
2. Add mouse PTZ in NVR Web Client. PTZ control is also related to permission control setting
3. Imporve the remote playback waiting time from 20 seconds to 5 seconds
4. Add support to Internet firewall deployment in NVR Web Client Login Screen. User has an option to choose NVR Server IP Address as default Streaming Engine in NVR Web Client login screen.

2. Getting Started

Administrator's Check List

Objective: To guide the administrator through the system setup.

Description: Please go through the checklist below for what items should be set.

NOTE: You can find the Quick Installation Guide and User Manual in the CD of the package.

No	Status	Description	Main Category	Reference
Pre-install				
1	□	Check PC requirement	To ensure the software running well, please make sure the PC spec is compatible with the software.	**Quick Installation Guide** Ch 1-Administrator's Check List
2	□	Prepare Software license	Our software has 16CH/32CH/48CH/64CH packages. Our software is free for 16CH. For 32CH/48CH/64CH please refer to license section for details.	**Quick Installation Guide** Ch 1-Administrator's Check List
Install				
1	□	Install Software	Please follow the installation guide step by step to install the software.	**Quick Installation Guide** Ch 2-Installing the Software
2	□	Check installation	After installation, please also check the below items before you move to next step.	**Quick Installation Guide**
			1. License input	**Quick Installation Guide** Ch 3-License Management
Setup				
1	□	Create Camera Group and add cameras	NVR camera channel management is based on camera groups. Start by creating camera groups and adding cameras. Ex: There are 4 floors in this system. You can start by creating 1F, 2F, 3F, 4F, 4 groups. When adding every single camera, you can select the group which it belongs to.	**User Manual** Ch 7 ActiveSetup
2	□	Configure Camera Setup	Set some camera settings, like PTZ setting, bit rate.	**User Manual** Ch 7 ActiveSetup
3	□	Configure Scheduling	Set the recording schedule for every single camera.	**User Manual** Ch 7 ActiveSetup

4	□	Configure Event handling	Set the action related to different events	**User Manual** Ch 7 ActiveSetup
5	□	Configure Storage	Set the HD arrangement and recording delete rule for storage	**User Manual** Ch 7 ActiveSetup
6	□	Configure Preview layout	Set the preview layout during preview	**User Manual** Ch 7 ActiveSetup
7	□	Configure E-map (Option)	Set the E-map.	**User Manual** Ch 7 ActiveSetup
8	□	Configure Accounts	Set the you accounts and select authentication level	**User Manual** Ch 7 ActiveSetup

Operator Check List

Objective: To guide the operator through the operation.

Description: Please go through the checklist below for what items should operator know.

NOTE: You can find the Quick Installation Guide and Operation Manual in the package of the CD.

No	Status	Main Category	Description	Reference
Setup				
1	□	Live Preview	Operator should be able to see the live preview and to do basic operations.	**User Manual** Ch 3 Active Monitor
2	□	PTZ control	Operator should be able to control the PTZ	**User Manual** Ch 3 Active Setup
3	□	E-map Preview	Operator should be able to launch the E-map preview and to do basic operations.	**User Manual** Ch 5 Active MAP
4	□	Search & Playback	Set the action related to different events	**User Manual** Ch 4 Active Player
5	□	Web-client Access operation	Set the action related to different events	**User Manual** Ch 6 Web-Client

Start ACTi NVR

To start ACTi NVR v2.0, simply click on the desktop.

ACTi NVR Workstation Components:

Icon	Name	Description
	`ActiveMonitor.exe`	Live view, PTZ, IP Joystick, system log monitor, event panel, Pre-defined layout, Tour
	`ActivePalyer.exe`	Archive player, synchronous playback, snapshot viewer, file export
	`ActiveMap.exe`	Map viewer, tour
	`ActiveSetup.exe`	System, camera and map setup

Login ACTi NVR

When starting ACTi NVR, a login message box prompts as follow:

Figure 2-1 NVR Login

Default Administrator Account / Password

Default Administrator Account: **Admin**

Default Administrator Password: **123456**

Default Server: **localhost**

NOTE: In the Server field, the user may type in different IP addresses or hostname; in this case, the NVR Workstation will connect to the IP address specified.

Change Password

Clicking on the profile section brings up the Personal Setting page. The user may easily change the password and preferred Language. Click Apply to confirm the setting.

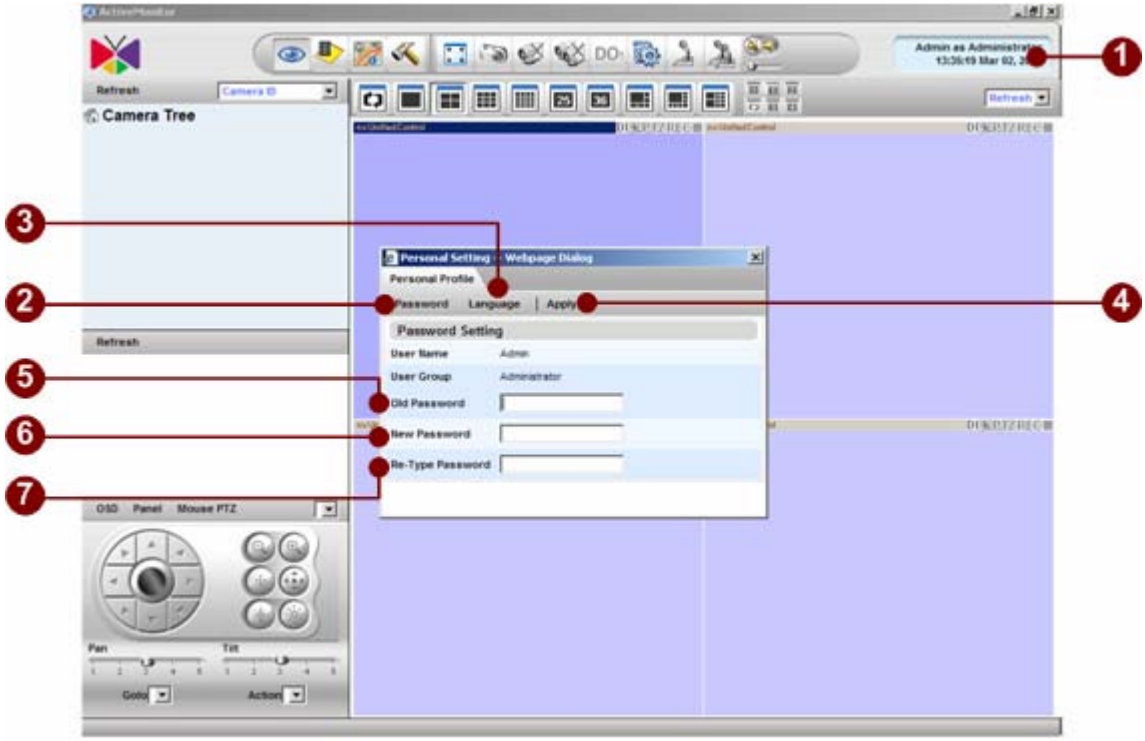


Figure 2-2 Change User's Password

1. **Personal Profile**: Click on this section brings up Personal Profile setting; user may change password and select preferred Language.
2. **Password Button**: Click on this button to change user's password.
3. **Language Button**: Click on this button to select preferred Language.
4. **Apply Button**: Apply this setting.
5. **Old Password**: Input old password.
6. **New Password**: Input new password.
7. **Re-Type Password**: Re-tpye new password.

Start a Camera Live View

Select a Camera from Camera Tree

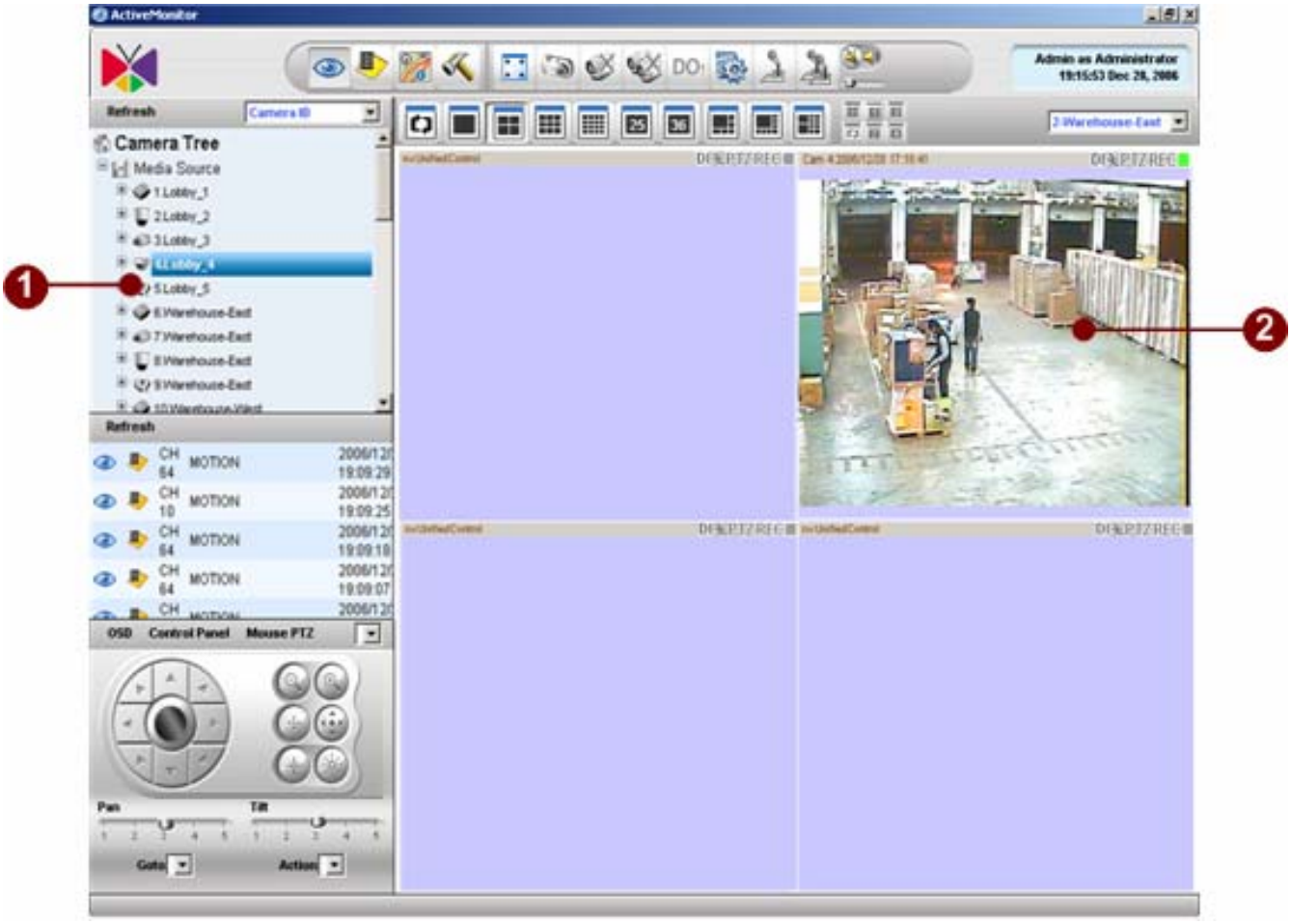


Figure 2-3 Preview Window

1. **Camera Tree**: Choose a Camera from camera tree.
2. **Preview Window**: Click on any window once to select it and enable functions for this specific camera (PTZ, snapshot, close camera, etc.)

Double Click on the Camera

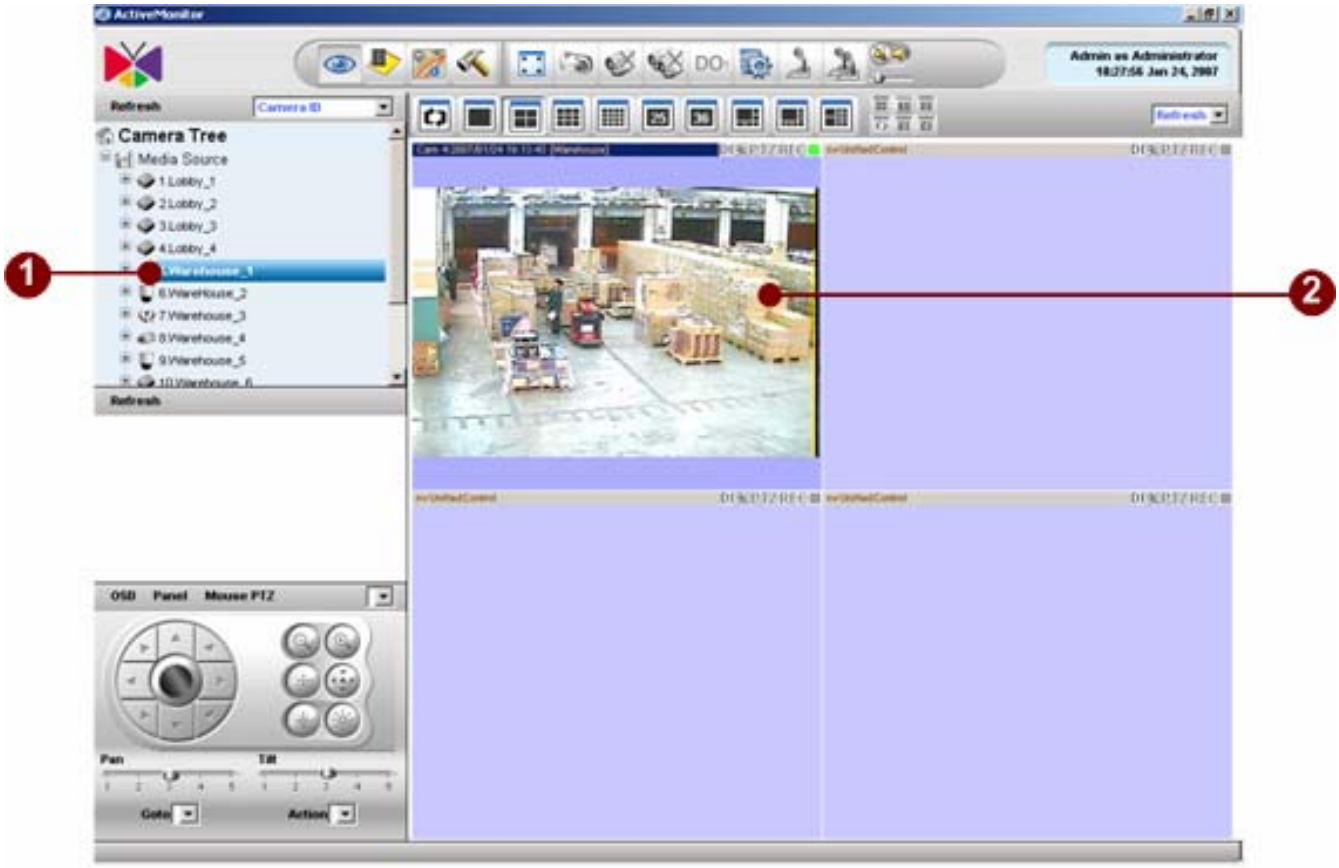


Figure 2-4 Double click on a camera to preview

1. **Camera Tree**: Double click on the camera icon that user wants to preview.
2. **Active Preview window**: User can see the video screen on the active preview window.

Drag-n-Drop a Camera

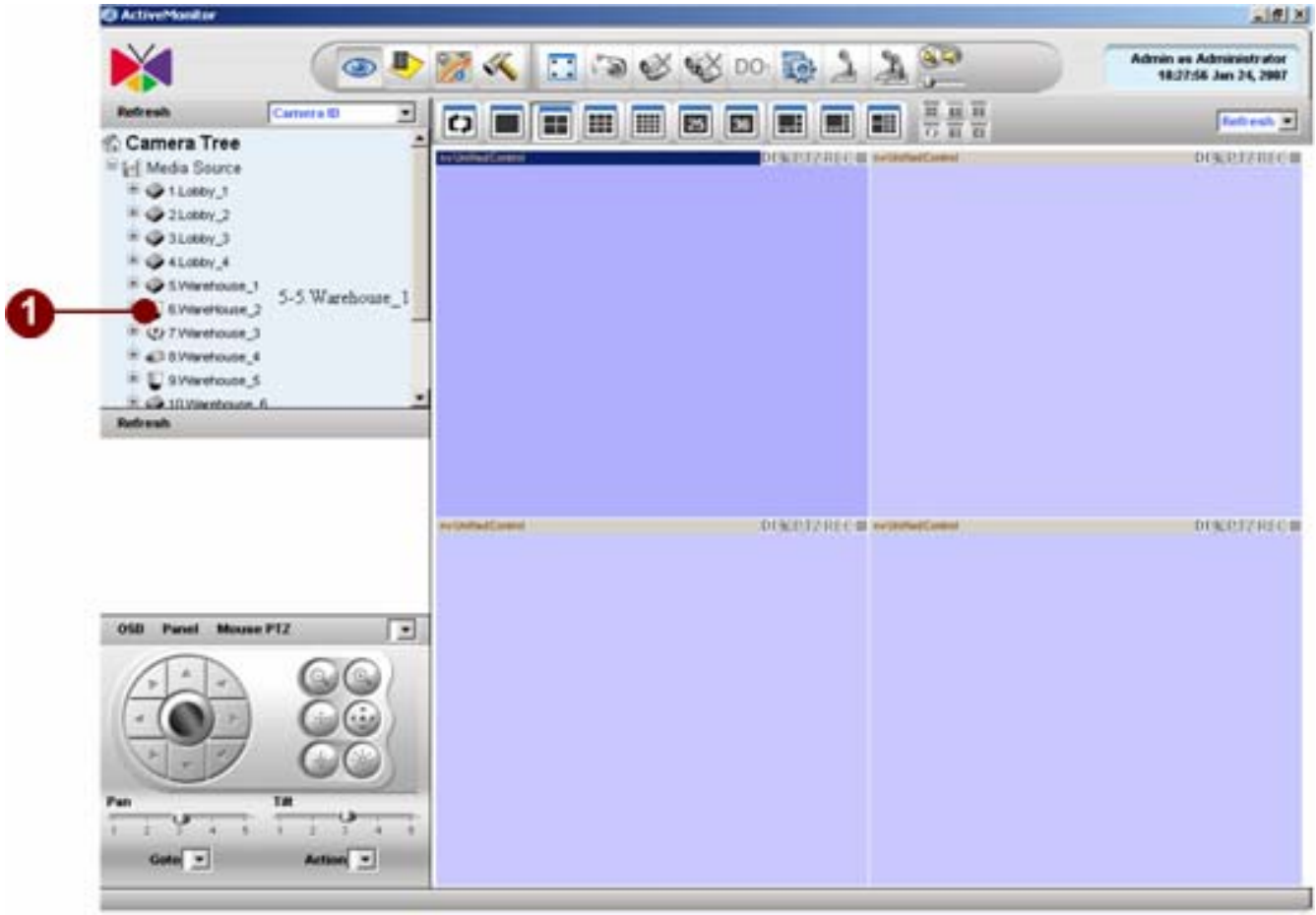
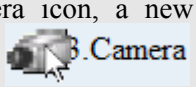


Figure 2-5 Drag and Drop a camera

1. **Camera Icon**: Choose the camera icon to be previewed, then click on the left mouse key and move it until user can see the camera name.

TIP: When you drag the camera icon, a new cursor (with camera name) will be displayed. The cursor looks like: 

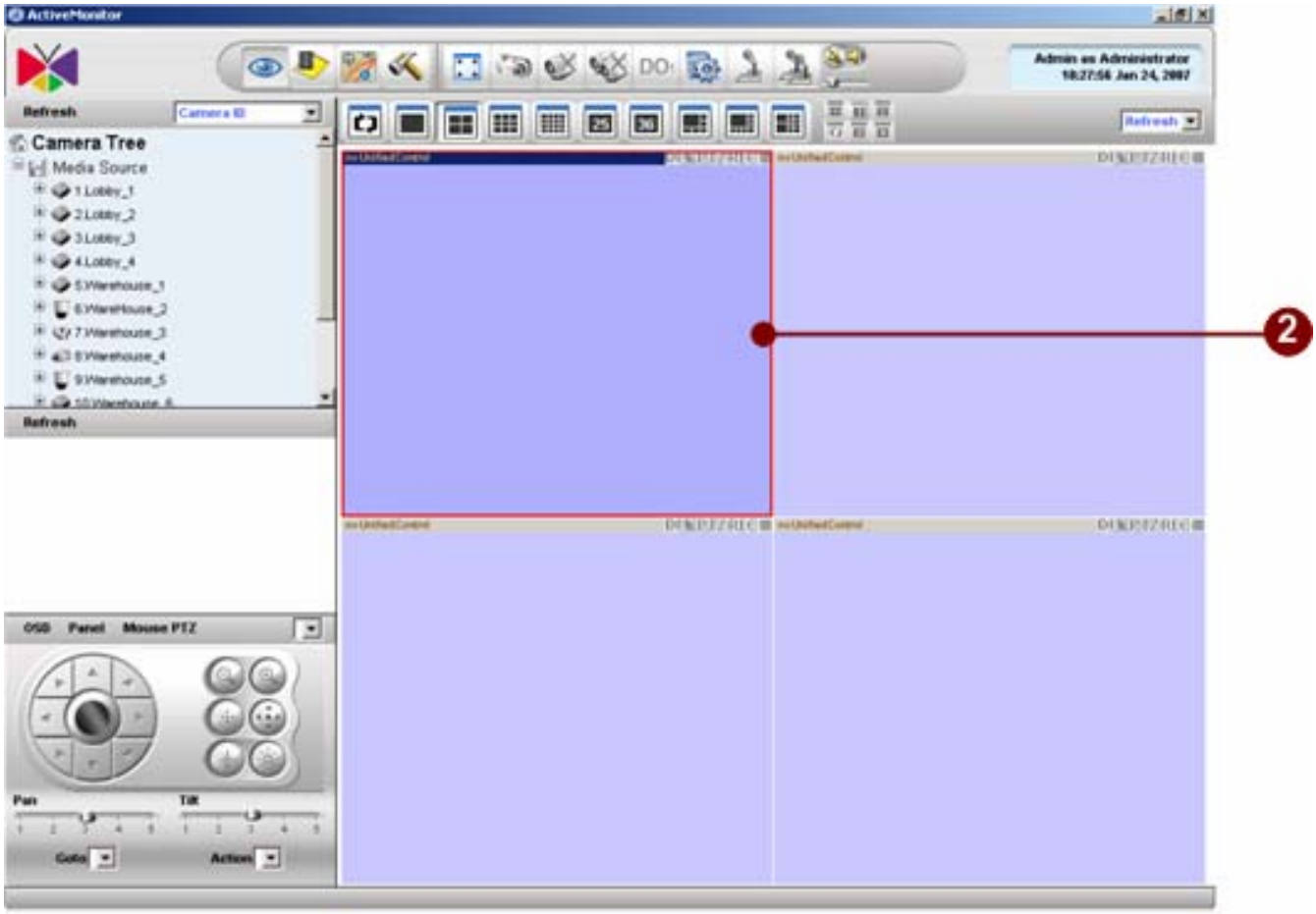


Figure 2-6 Move the camera to active window

2. **Active Preview Window**: drag the camera icon to an active preview window to reveal the red frame, then drop the icon to preview that camera.

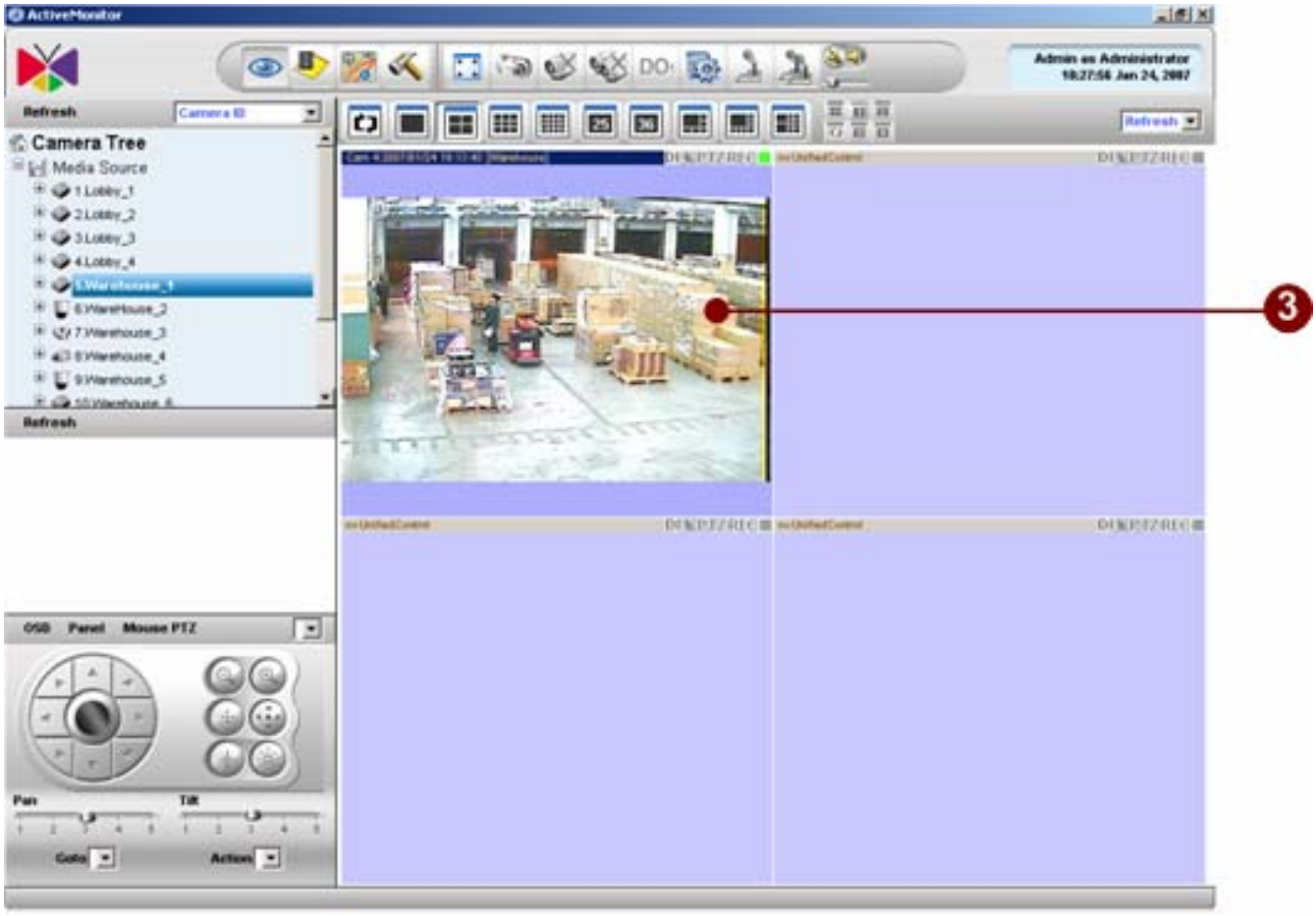


Figure 2-7 Preview Camera

3. **Preview Window**: the user can see the video screen on the active window.

Stop a Camera Live View

Close Camera Live View

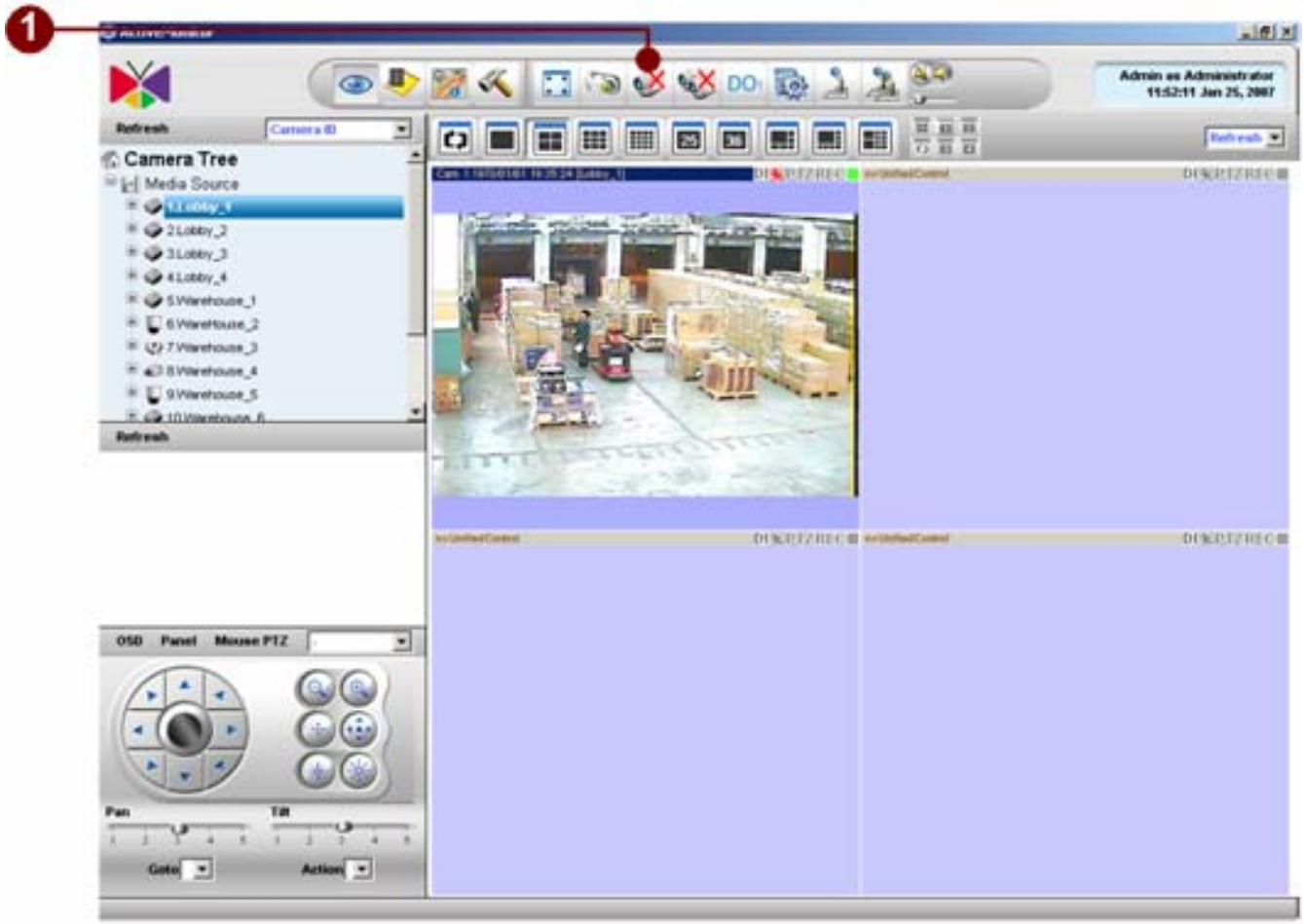


Figure 2-8 Disconnect a Channel

1. **Disconnect A Channel**: Click once to stop video streaming for the selected window.

Start Other Application

Start Active Player, Active Map and Active Setup

Figure 2-9 Active Program Tool Bar

1. **Active Monitor Button**: User can click this button to switch to Active Monitor program.
2. **Active Player Button**: User can click this button to switch to Active Player program.
3. **Active eMap Button**: User can click this button to switch to Active eMap program.
4. **Active Setup Button**: It shows that use rare using ActiveSetup program.
5. **System Setup Button**: User can click this button to switch to System Setup.
6. **Camera Setup Button**: User can click this button to switch to Camera Setup.
7. **eMAP Setup Button**: User can click this button to switch to eMAP Setup.

Start Utility

You can go to “START➔Program Files➔ACTi➔NVR” to find ACTi’s Utility.

ACTi Utility Suite Components:

Icon	Name	Description
	`IPUtility.exe`	Search and manage ACTi devices, firmware upgrade, configuration backup and restore
	`Explorer.htm`	Web browser application to configure PTZ settings.
	`ArchivePlayer.exe`	Standalone archive player, create snapshots, display time code on the video window directly. Able to play **`.RAW`** and **`.MP4`** format
	`BackupWizard.exe`	Backup and restore ACTi NVR v2.0
	`MediaConverter.exe`	Converts **`.RAW`** data format to **`.AVI`** format
	`FFDShow.exe`	MPEG-4 DirectShow filter. This is necessary if user wants to play **`.AVI`** file with Microsoft Windows Media Player.

Quit ACTi NVR

Simply click on to quit ACTi NVR v2.0.

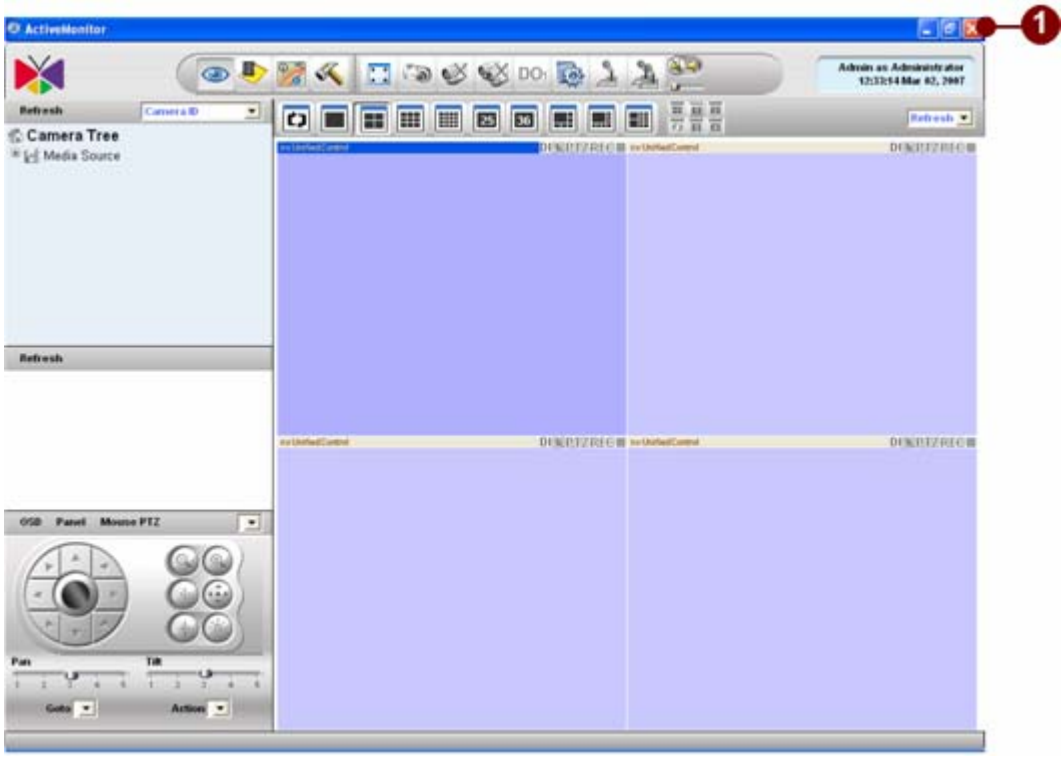


Figure 2-10 Exit ACTi NVR

Check Version

Clicking on the logo section will bring the About Us dialog box. The user may easily review the current software version and system information.

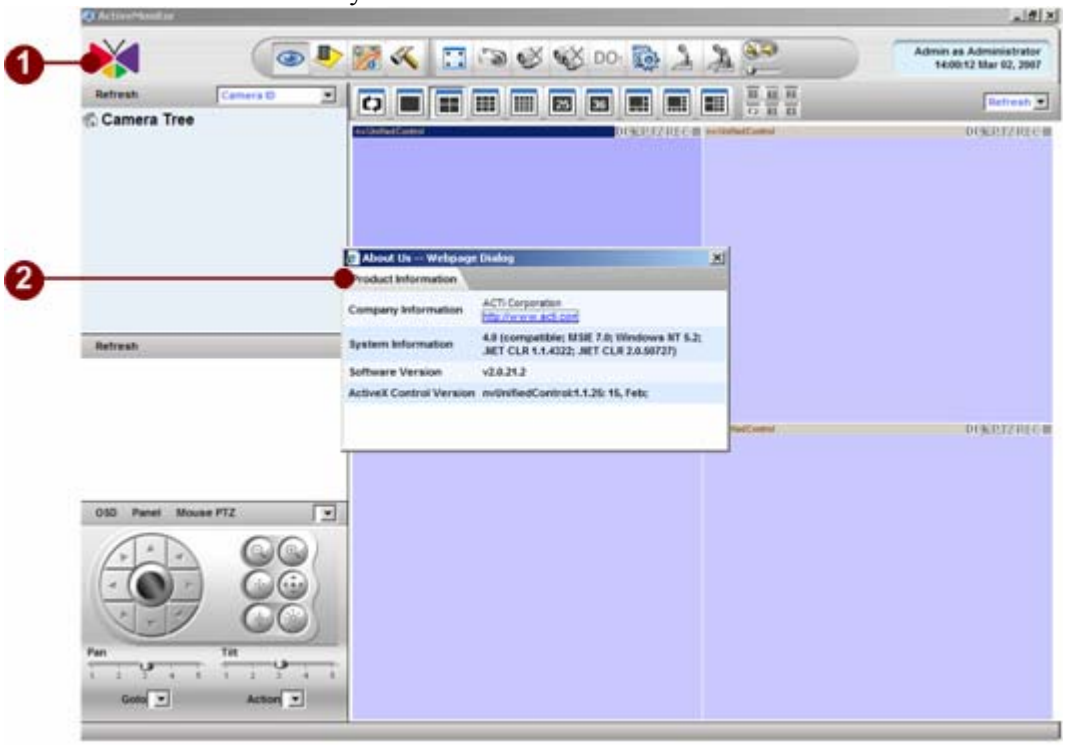


Figure 2-11 Check Version

3. Active Monitor

Introduction

The Monitor Console (Active Monitor) is the application designed to perform live preview for installed ACTi devices. It allows for up to 36 concurrent video preview windows, including a variety of preview modes.

Advanced features of the Monitor Console include event logs, sound broadcast, manual digital output to device, automatic layout touring, PTZ control, and many more. This section explains the interface in detail, as well as gives instructions for using these advanced functions.

Overview

The section describes ACTi NVR Active Monitor functions, including camera preview

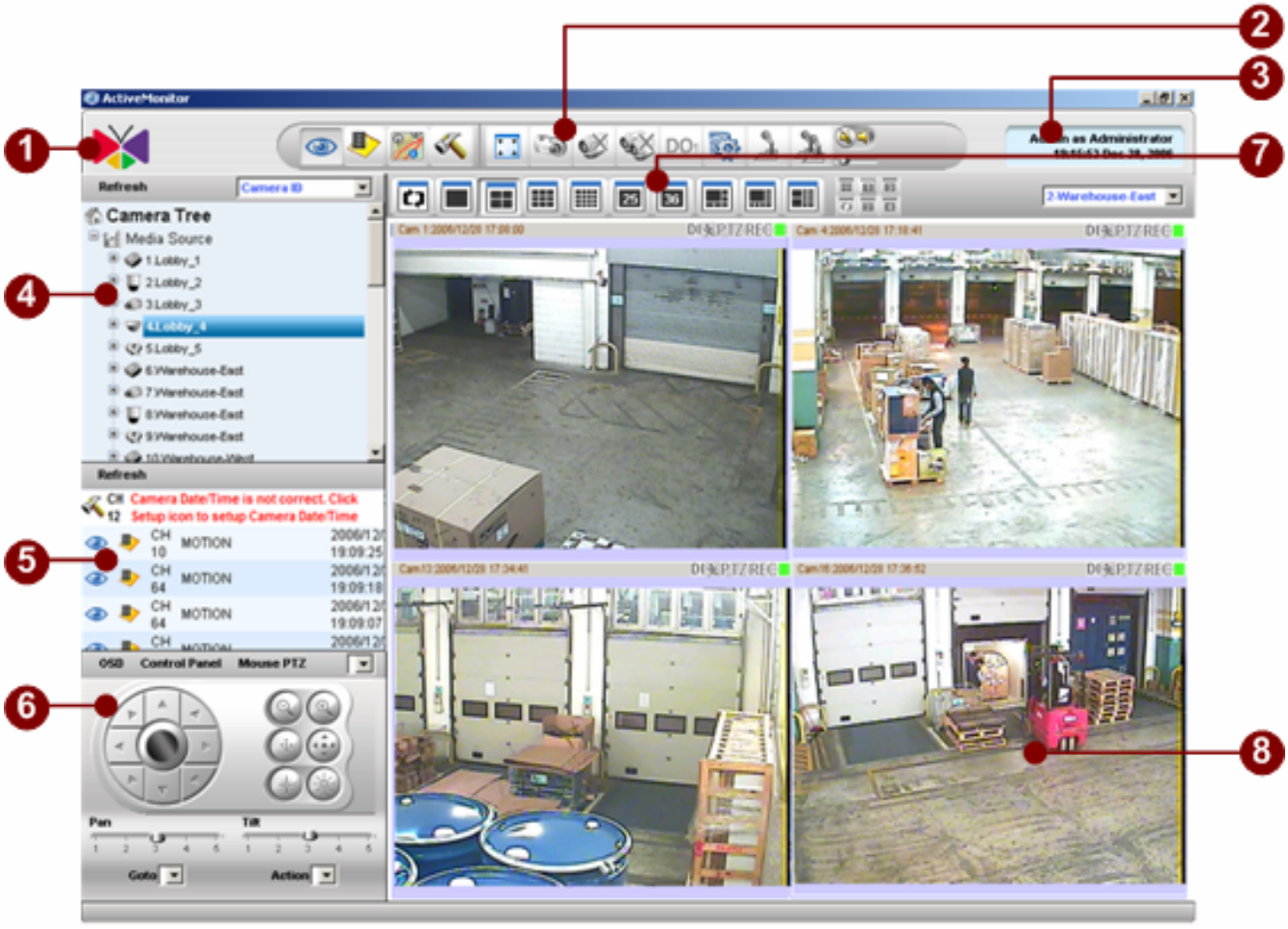


Figure 3-1 User Interface

1. **Logo**: Click on the logo to bring up the About Us dialog box which contains software version, system version and company information.
2. **Active Monitor Toolbar**: Contains buttons to operate in Active Monitor application
3. **Personal Profile**: Click on this section brings up Personal Profile setting; user may change password and select preferred Language.
4. **Camera Panel**: Displays camera tree.
5. **Event Panel**: Displays event generated, including motion detection, alarm input, camera date/time is not correct and video loss events. User may click on each item to see further details.

NOTE: In the event panel, a new event called "Camera Date/Time is not correct. Check Setup icon to setup Camera Date Time". If this happens, it means that specific camera's date/time is not setup correctly, this will affect recording, searching and playback. Please

click icon to setup camera date/time accordingly.

6. **PTZ Panel**: PTZ operations
7. **Layout Manager**: Controls the various window layout
8. **Video Window**: Each video window displays live view from one video source from camera panel.

Preview Operation

Channel Preview

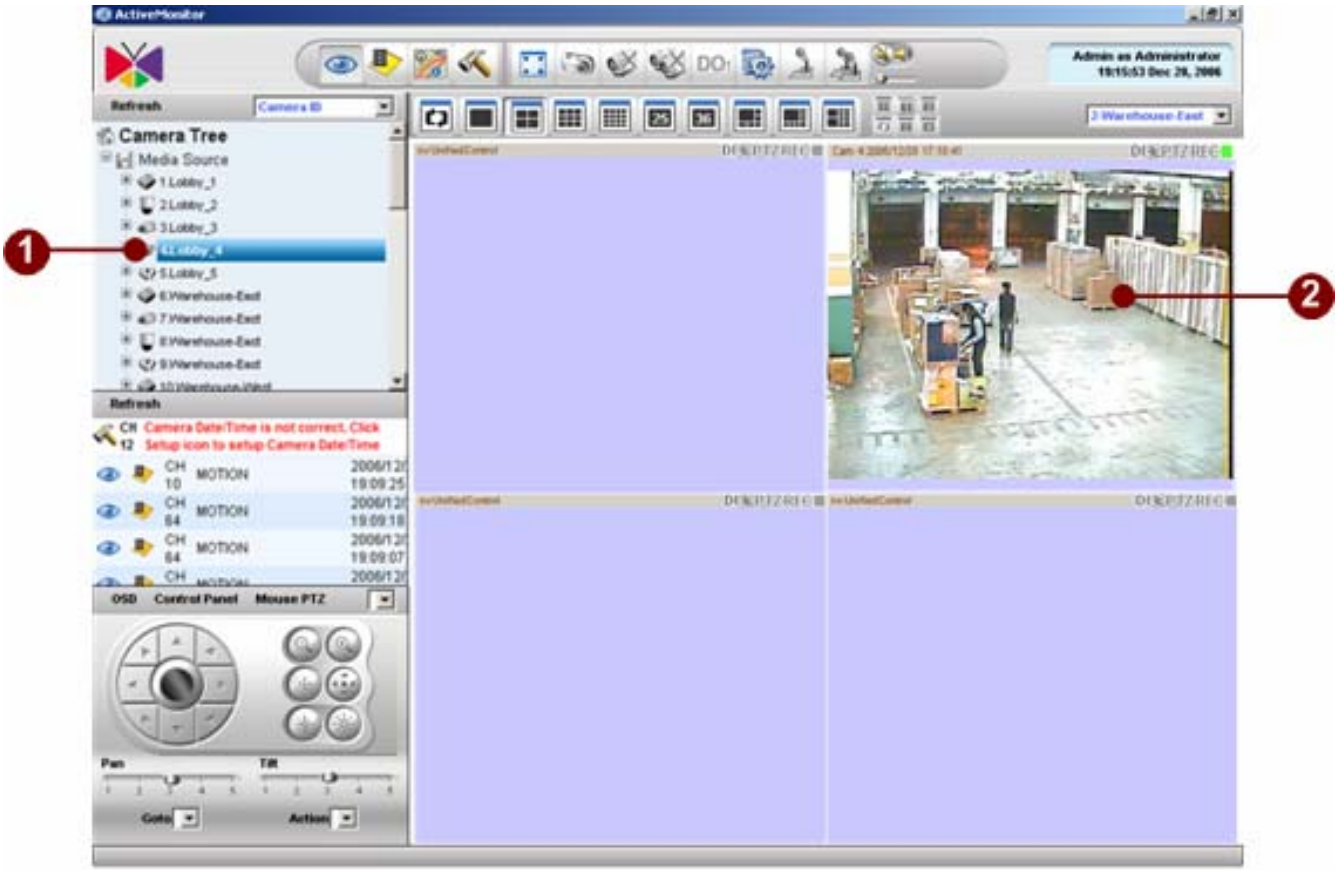


Figure 3-2 Preview Window

1. **Camera Panel**: Displayed camera information in tree directory.
2. **Preview Window**: Click on any window once to select it and enable functions for this specific camera (PTZ, snapshot, close camera, etc.)

TIP: To preview a channel, first click on a video window in layout manager, then double-click on the camera in the Camera panel, or drag the camera into the video window in the layout manager.

Drag and Drop a Camera to preview

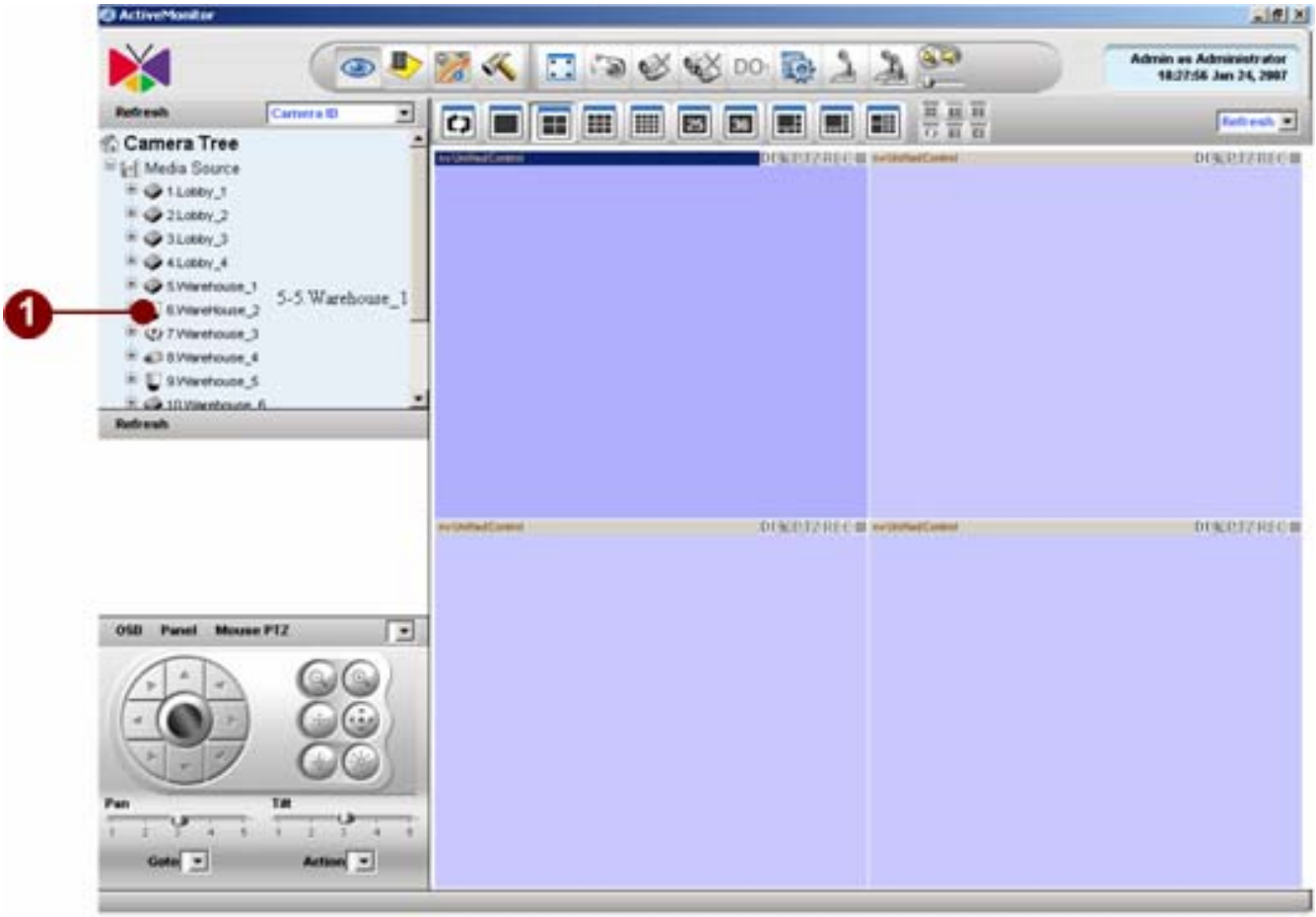


Figure 3-3 Drag and Drop a camera

1. **Camera Icon**: Choose the camera icon to be previewed, then click on the left mouse key and move it until user can see the camera name.

TIP: When you drag the camera icon, a new cursor (with camera name) will be displayed. The cursor looks like:

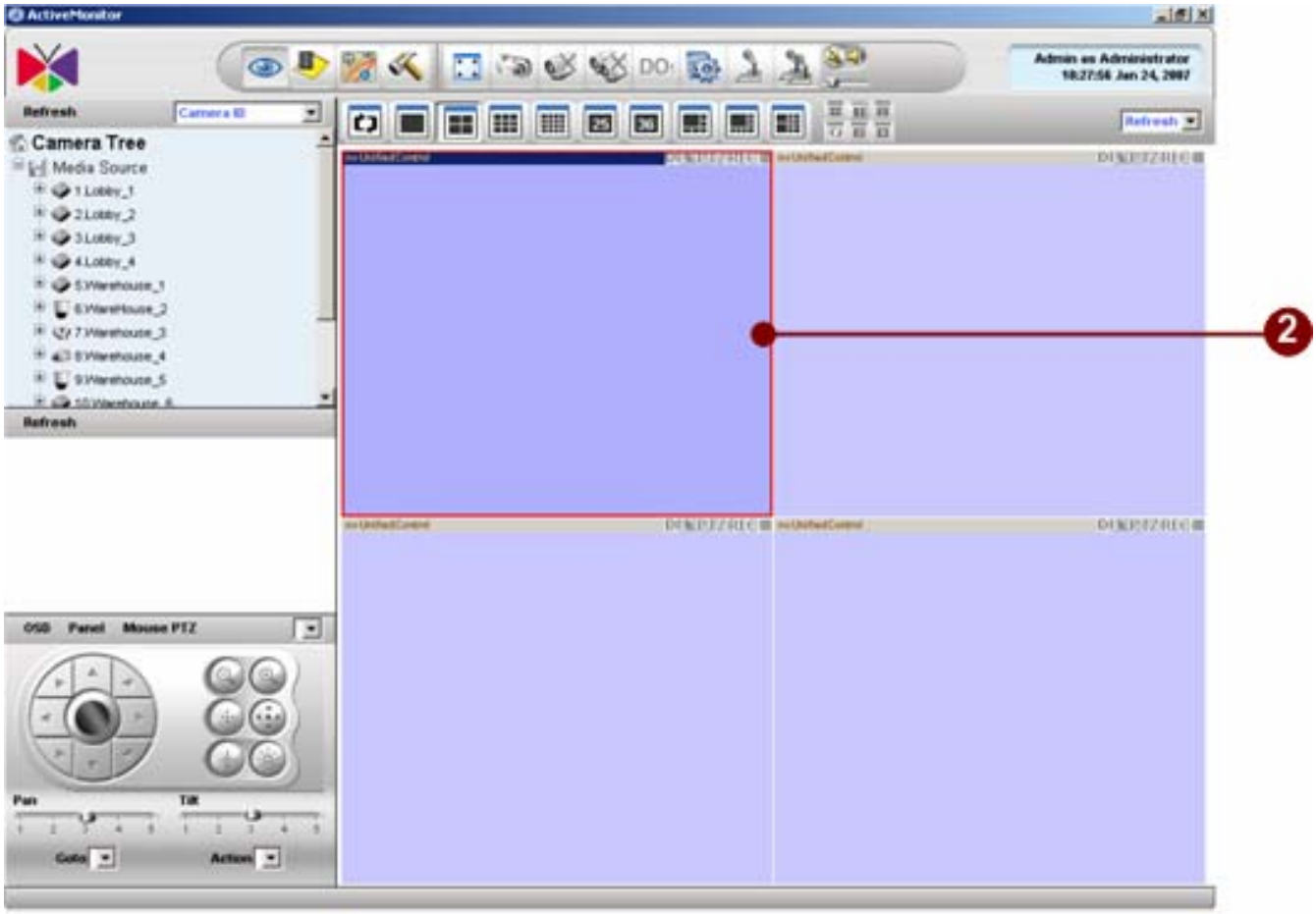


Figure 3-4 Move the camera to active window

2. **Active Preview Window**: drag the camera icon to an active preview window to reveal the red frame, then drop the icon to preview that camera.

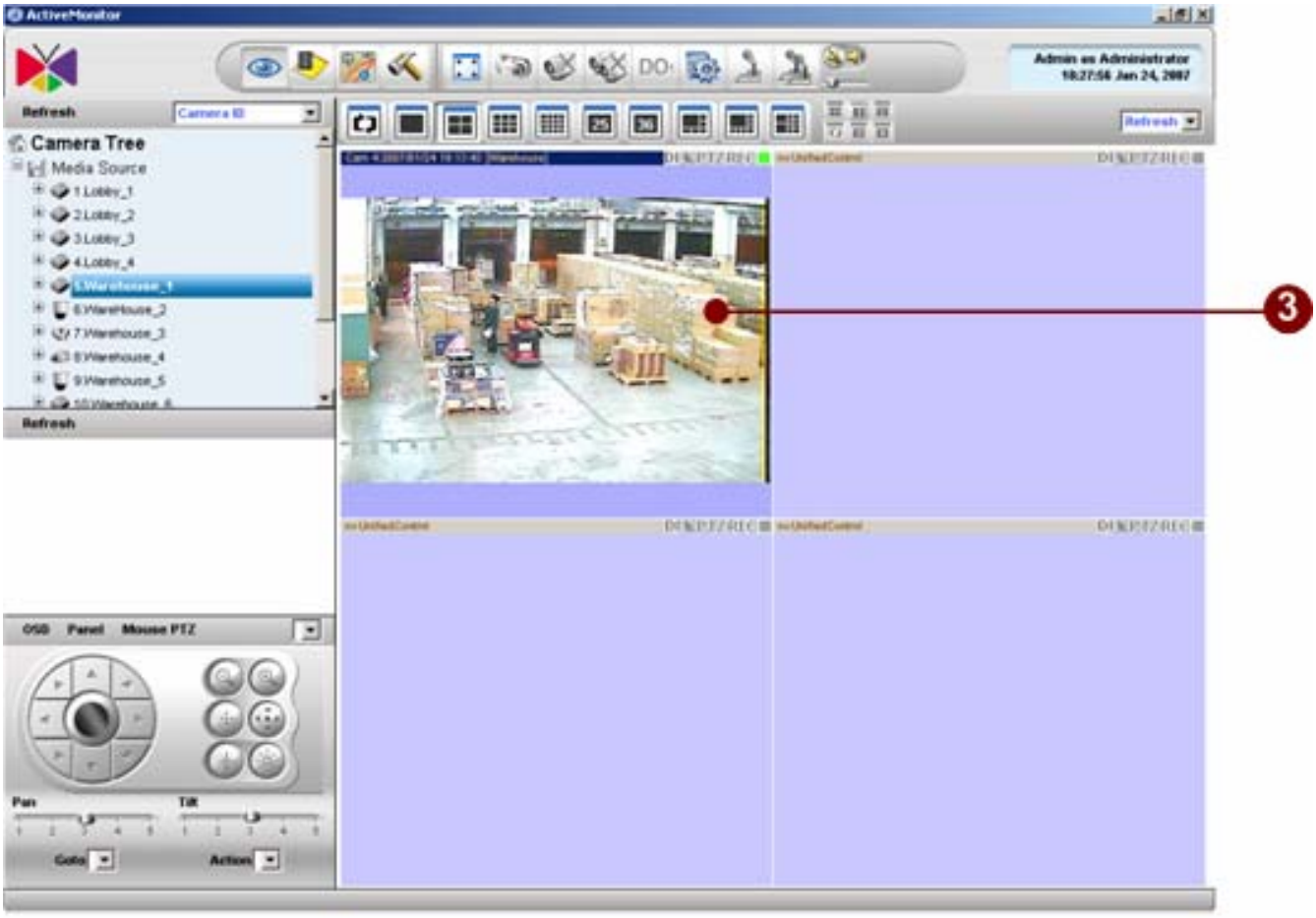


Figure 3-5 Preview Camera

3. **Preview Window**: the user can see the video screen on the active window.

Double-click on a Camera to Preview

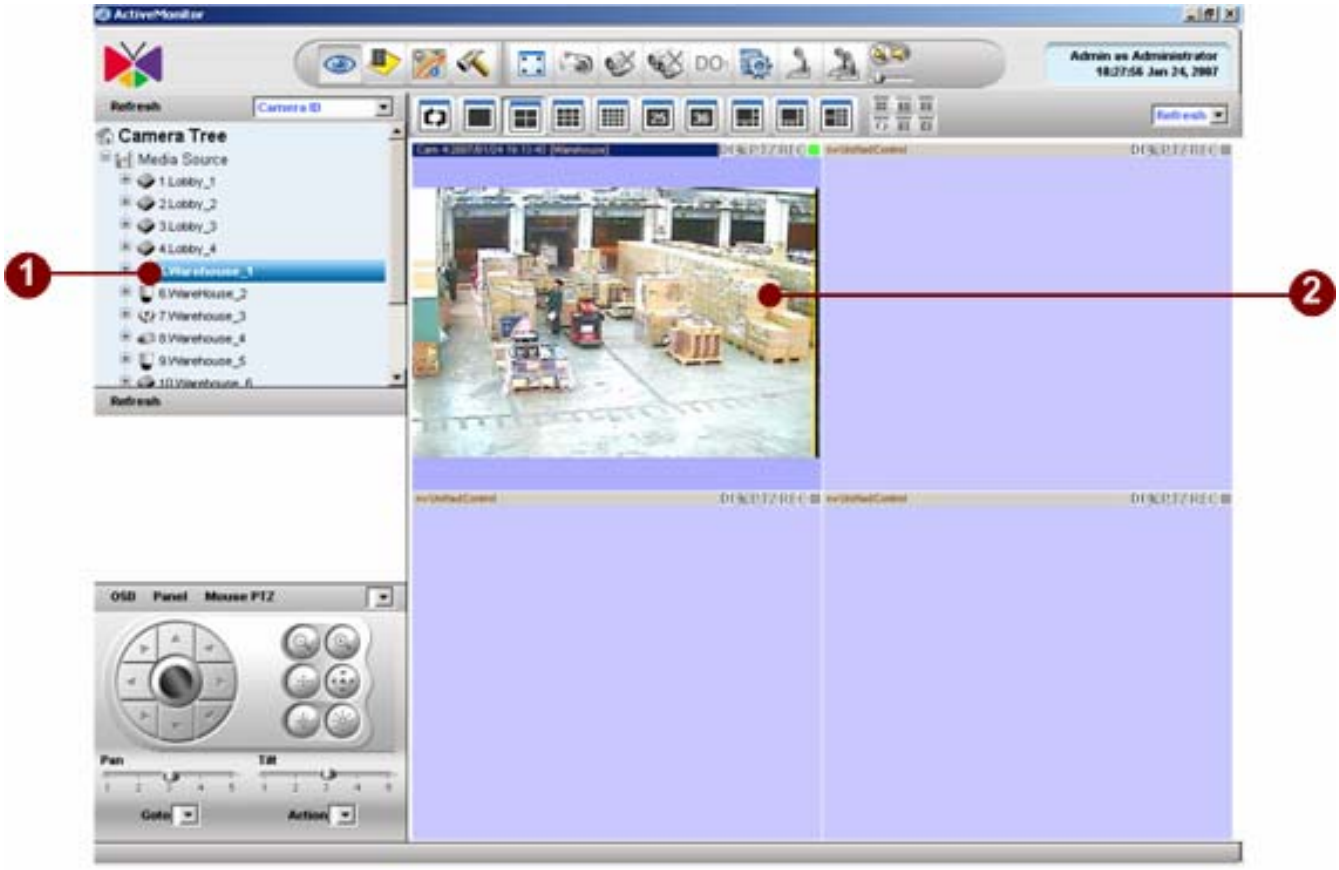


Figure 3-6 Double click on a camera to preview

1. **Camera Tree**: Double click on the camera icon that user wants to preview.
2. **Active Preview window**: User can see the video screen on the active preview window.

Active Monitor Toolbar

Figure 3-7 Active Monitor Toolbar

1. **Active Monitor**: Click on this button to go to the Active Monitor application.
2. **Archive Player**: Click on this button to go to the Archive Player application.
3. **Active E-Map**: Click on this button to go to the Active E-Map application.
4. **Setup**: Setup the System, Camera and E-Map.
5. **Full Screen**: Click to bring the video into full-screen mode. To bring the controls back, press ESC.
6. **Snapshot**: Takes a single screenshot at maximum resolution for the selected video only. The screenshot is saved as an JPG file in the Recording Path defined in the Recording of Camera Setup. Please refer to the **Recording** section for details.
7. **Disconnect A Camera**: Click once to stop video streaming for the selected window.
8. **Disconnect All Camera**: Click once to stop video streaming for all preview windows.
9. **Trigger DO1**: Click once to trigger DO1 of the selected camera.
10. **System Monitor**: Click on this button to brings up system log.
11. **Speak**: Pressing this icon enables audio transmission to the selected video device; un-pressing it disables the transmission.
12. **Broadcast**: Pressing this icon enables audio transmission to all video devices that appear in this layout; un-pressing it disables the transmission.
13. **Volume Control**: turn on/off and adjust the volume.

NOTE: If no action is visibly performed while pressings buttons 1 through 4, check if there is already an instance of the application minimized.

Full Screen Mode (F12)

Figure 3-8 Full screen button

1. **Full-screen**: Click to bring the video into full-screen mode. To bring the controls back, press ESC.

NOTE: Full-screen maximizes the entire layout of videos instead of just the selected window. It will also not expand the video should the size of the window exceeds the maximum resolution of the video.

TIP: The user can also use **F12** to invoke this function. To stretch the video to fit the window, user can use **F11** function key to toggle this function.

Figure 3-9 Full Screen Mode

Create Snapshot (F7)

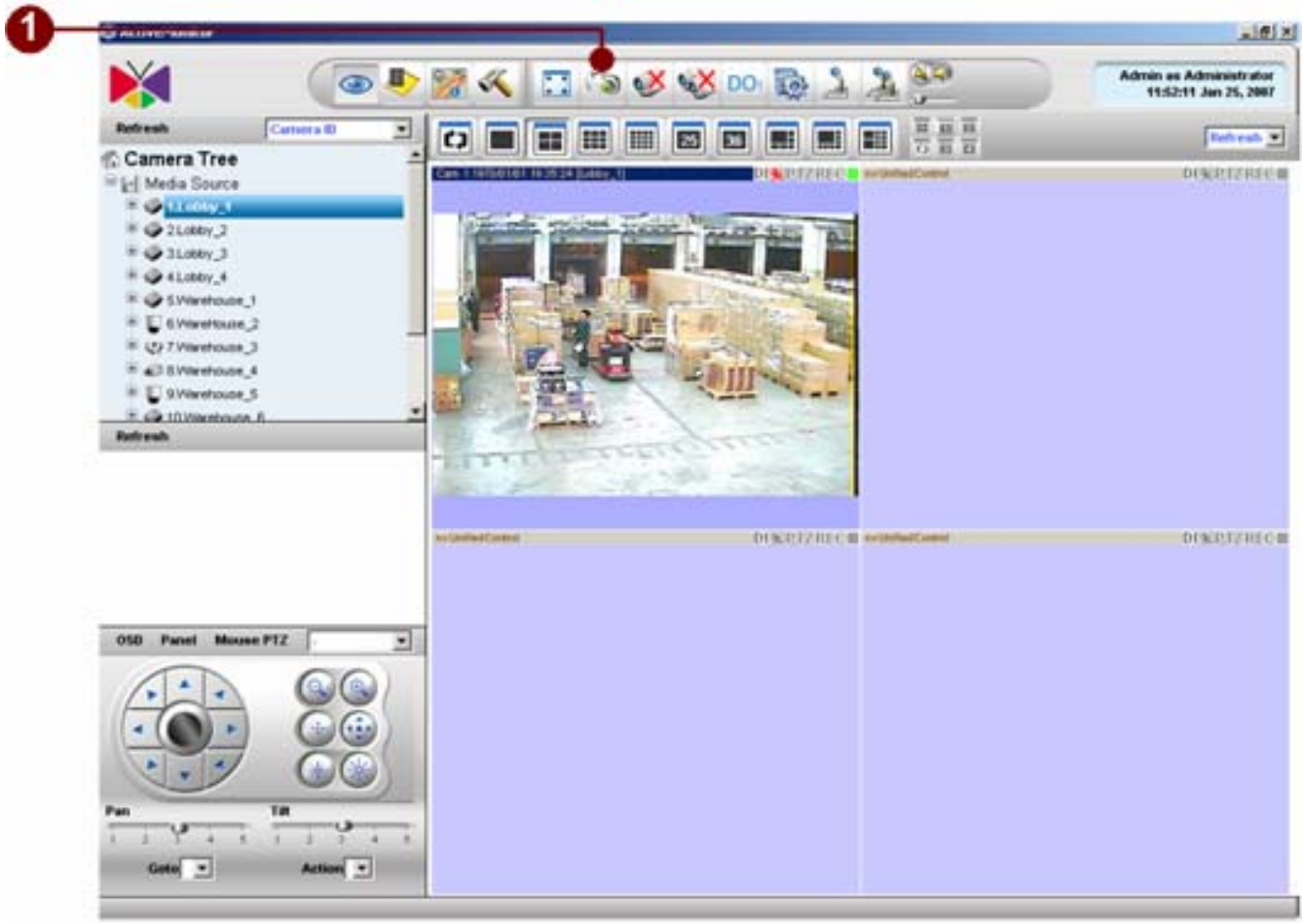


Figure 3-10 Create Snapshot

1. **Snapshot**: Takes a single screenshot at maximum resolution for the selected video only. The screenshot is saved as an JPG file in the Recording Path defined in the Recording of Camera Setup. Please refer to **Recording** section for details.

Disconnect a Channel

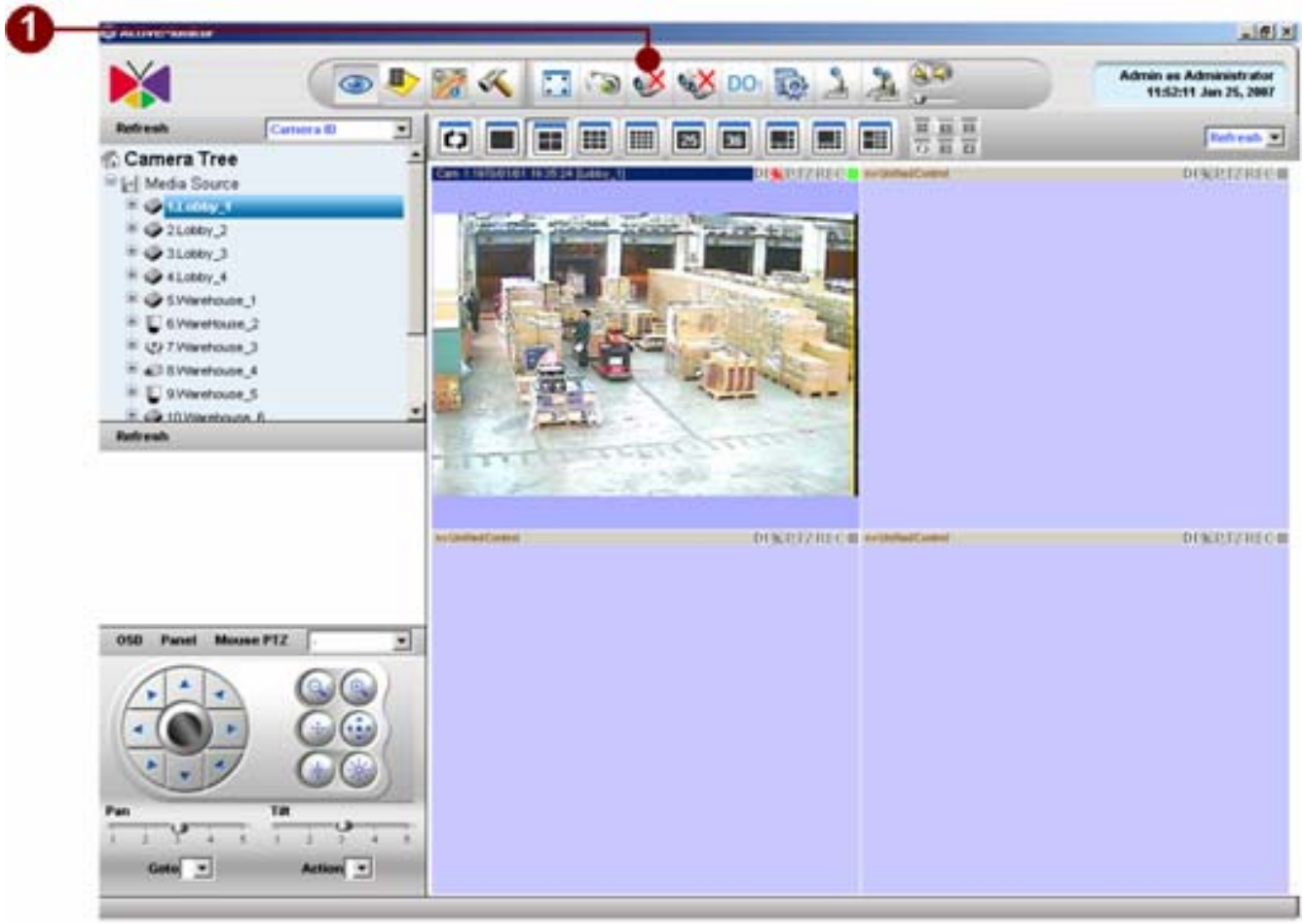


Figure 3-11 Disconnect a Channel

2. **Disconnect A Channel**: Click once to stop video streaming for the selected window.

Disconnect All Channels

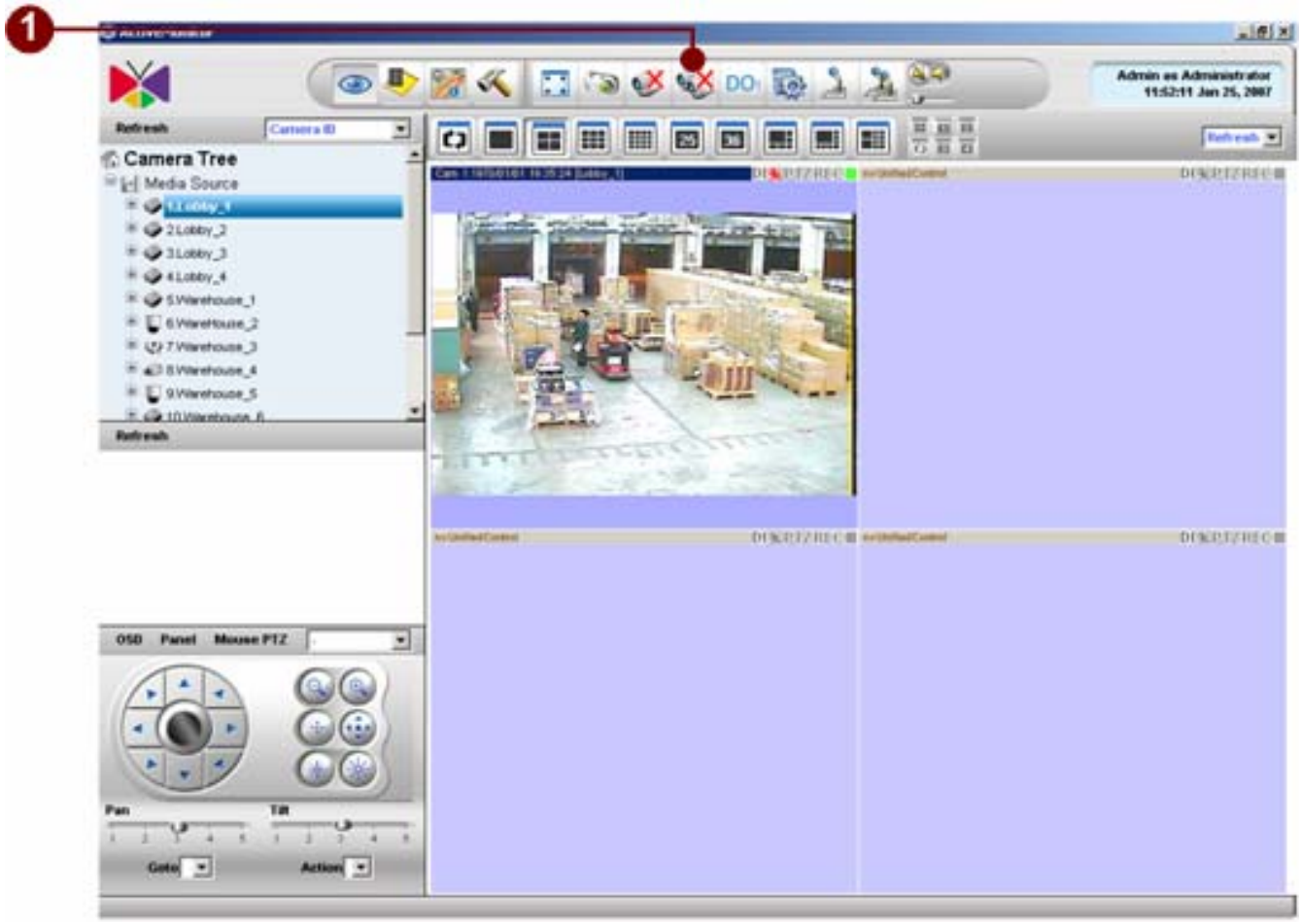


Figure 3-12 Disconnect all Channel

1. **Disconnect All Channels**: Click once to stop video streaming for all preview windows.

Trigger DO1 (Toggle)

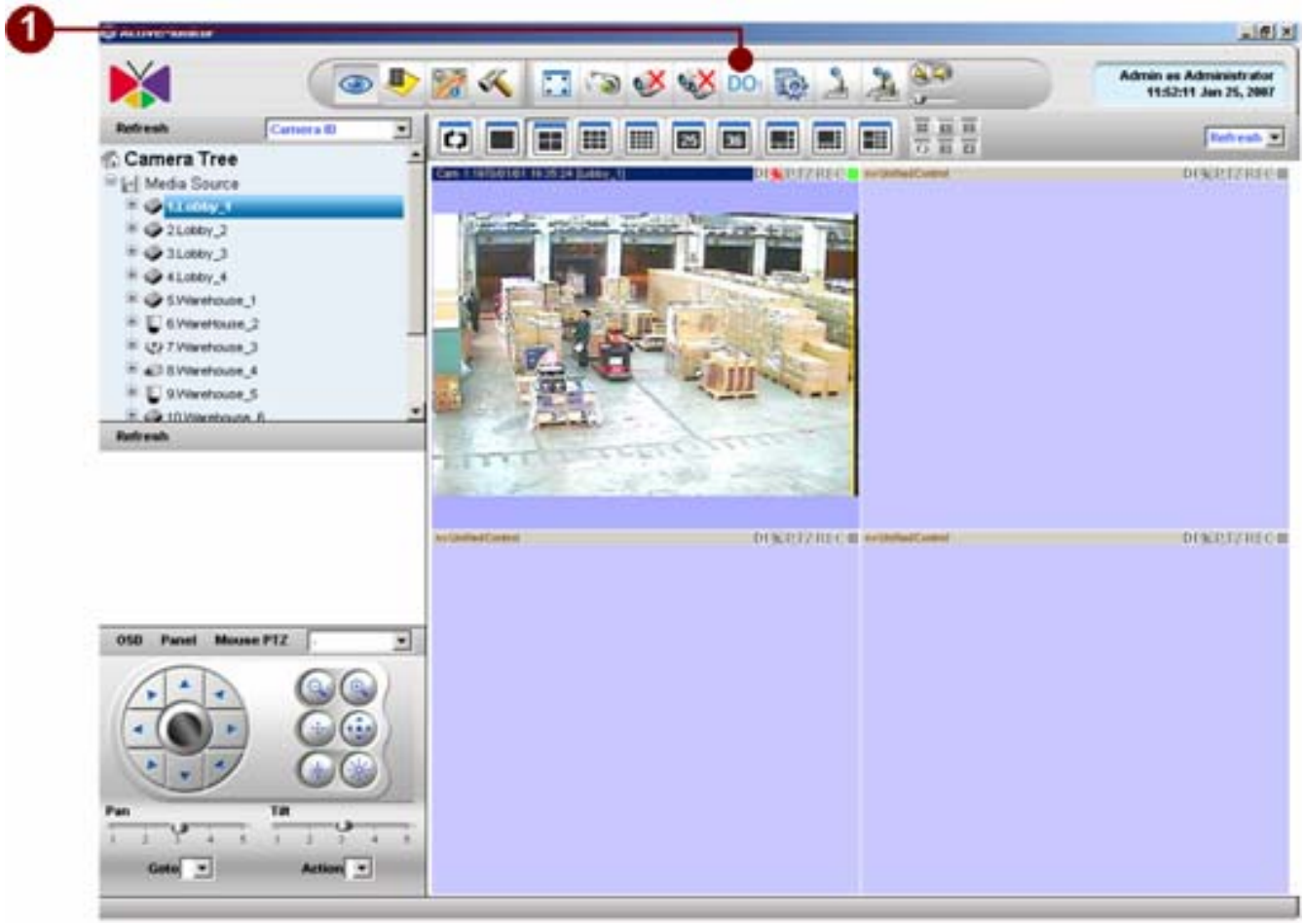


Figure 3-13 Trigger DO1

1. **Trigger DO1**: Click once to trigger DO1 of selected camera.

System Monitor

Figure 3-14 System Monitor Button

1. **System Log**: Clicking on button brings up system log.

System Monitor Listing

System Monitor contains the following information:

1. **Recorded**: Recording information
2. **Deleted**: Deletion information, including database and archive file
3. **Alarm**: Alarm information, including digital input 1 and 2
4. **Motion**: Motion detection information
5. **Network Loss/Recovery**: Network loss or recovery information
6. **Video Loss/Recover**: Video loss or recovery information
7. **User Login/Logout**: User login or logout information

System Monitor - Recorded

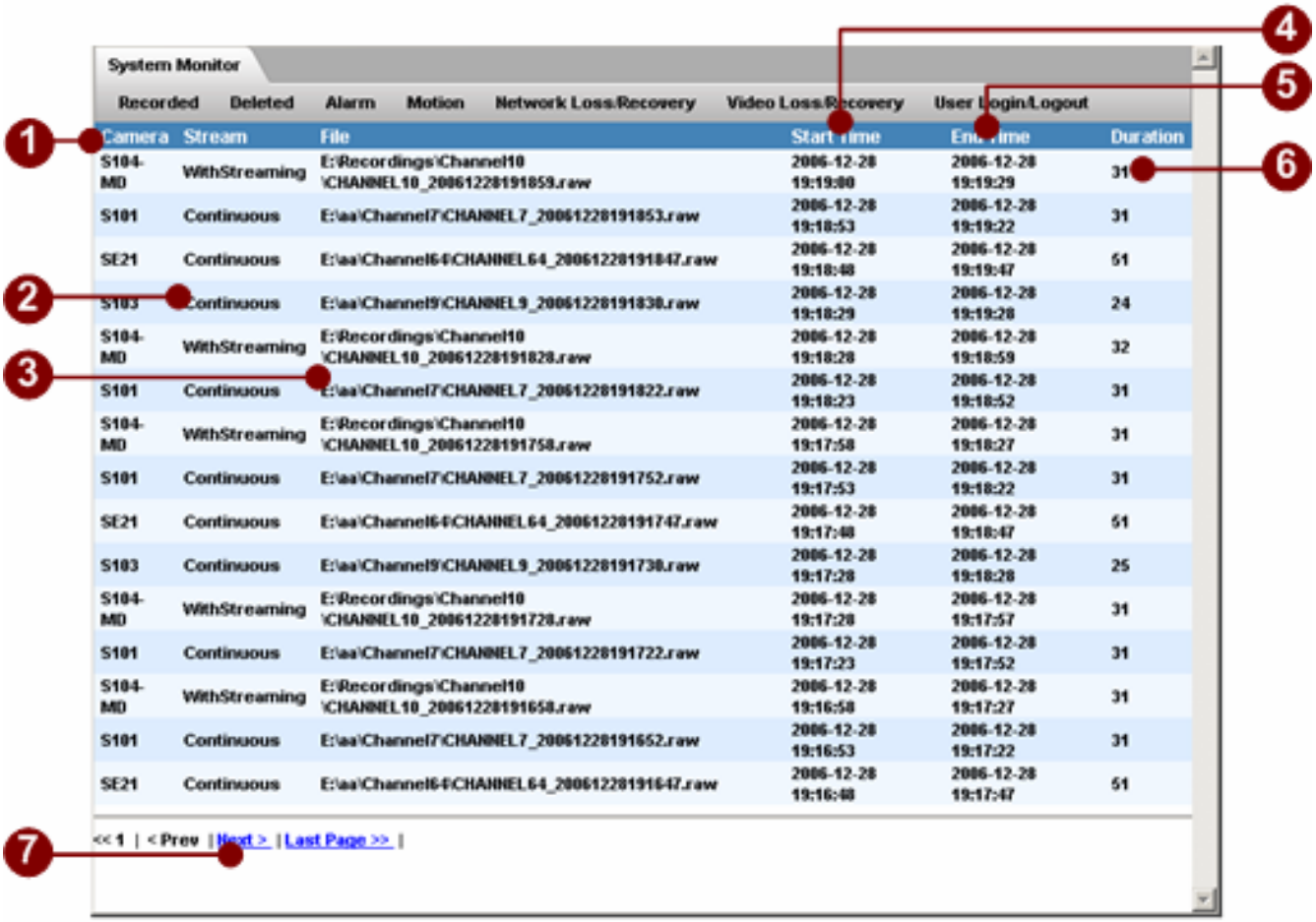


Figure 3-15 System Monitor - Recorded

1. **Camera**: Camera Name
2. **Stream**: Recording type, including **Continuous**, **Event With Streaming** and **Schedule**
3. **File:** File location on the disk
4. **Start Time:** Stat time
5. **End Time:** End time
6. **Duration:** Length of the recorded archive
7. **Page Indicator:** Traverse to first, last, previous or next page

System Monitor - Deleted

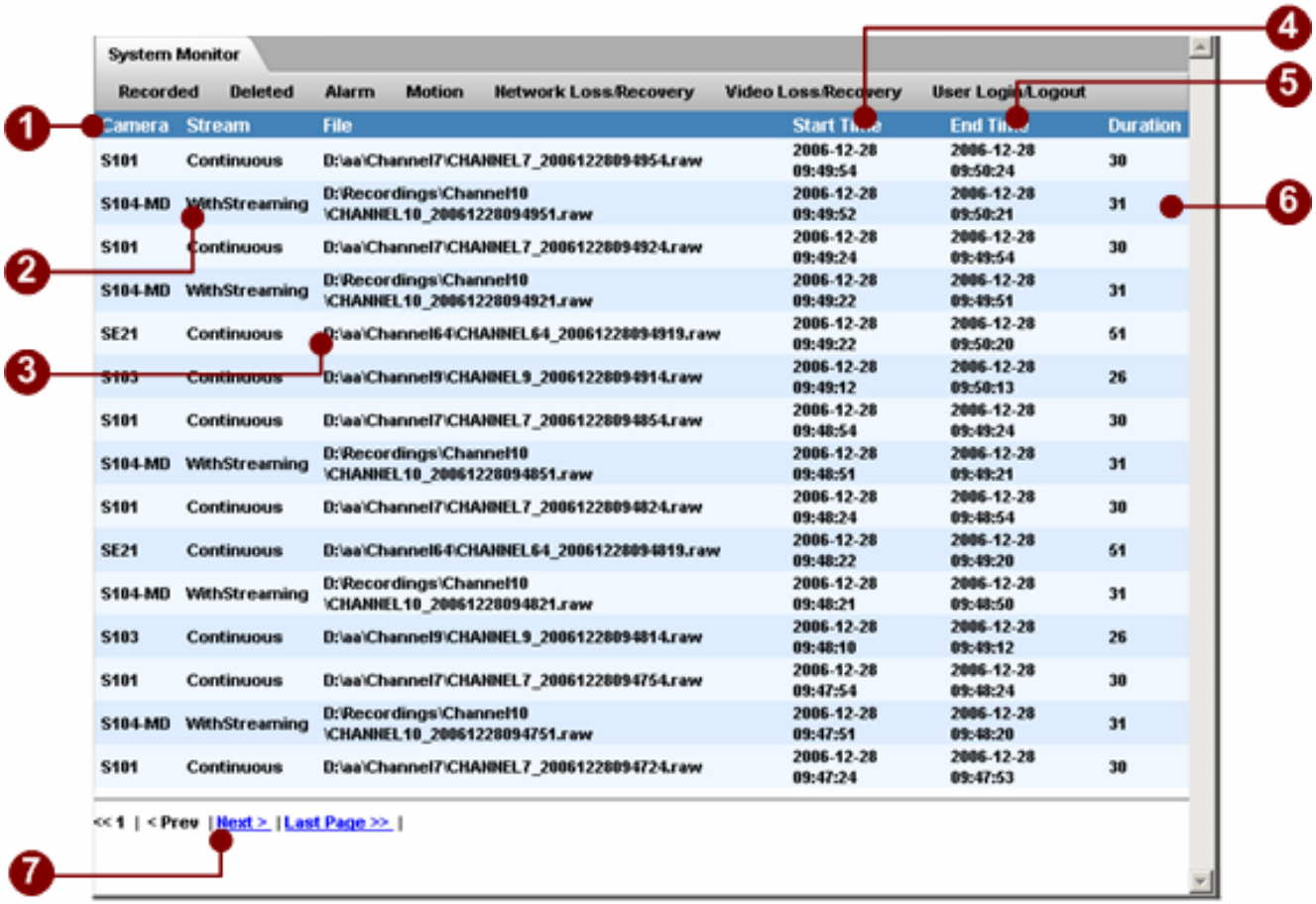


Figure 3-16 System Monitor - Deleted

1. **Camera**: Camera Name
2. **Stream**: Recording type, including **Continuous**, **Event With Streaming** and **Schedule**
3. **File:** File location in the disk
4. **Start Time:** Stat time
5. **End Time:** End time
6. **Duration:** Length of the recorded archive
7. **Page Indicator:** Traverse to first, last, previous or next page

System Monitor - Alarm

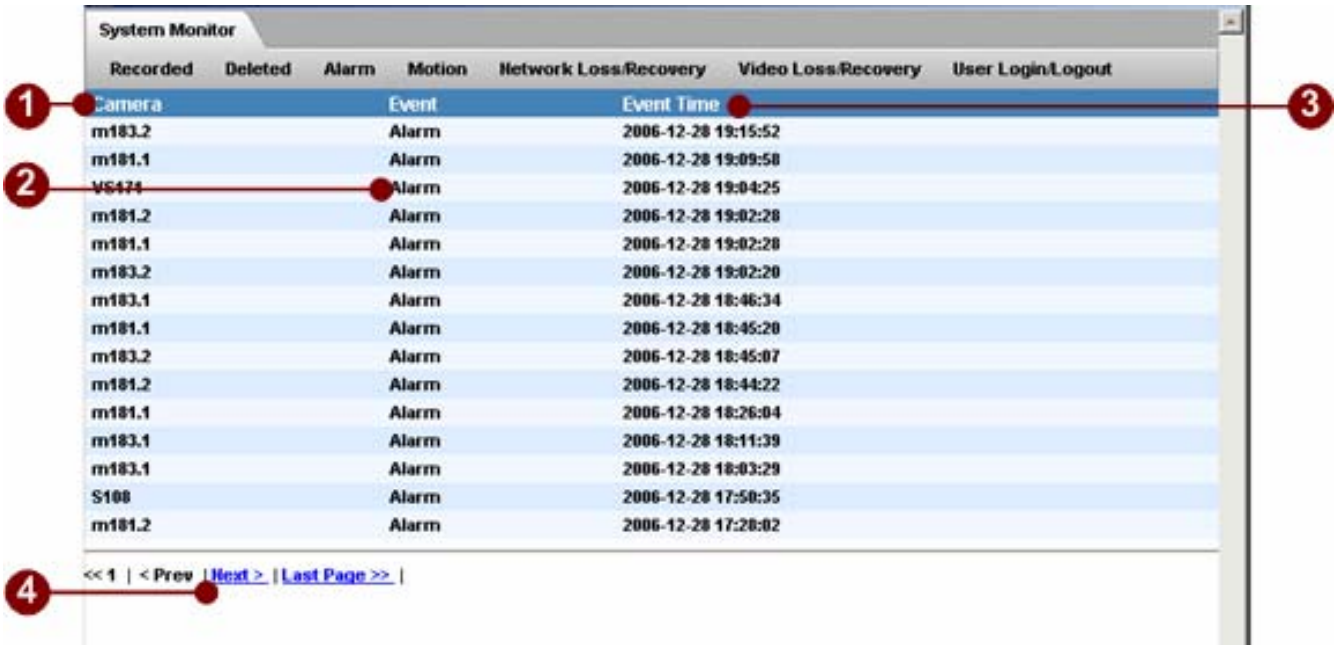


Figure 3-17 System Monitor - Alarm

1. **Camera**: Camera Name
2. **Event**: Alarm type
3. **Event Time:** The time of the occurrence of the event
4. **Page Indicator:** Navigate through the record set, including first page, last page, previous page, next page

System Monitor - Motion

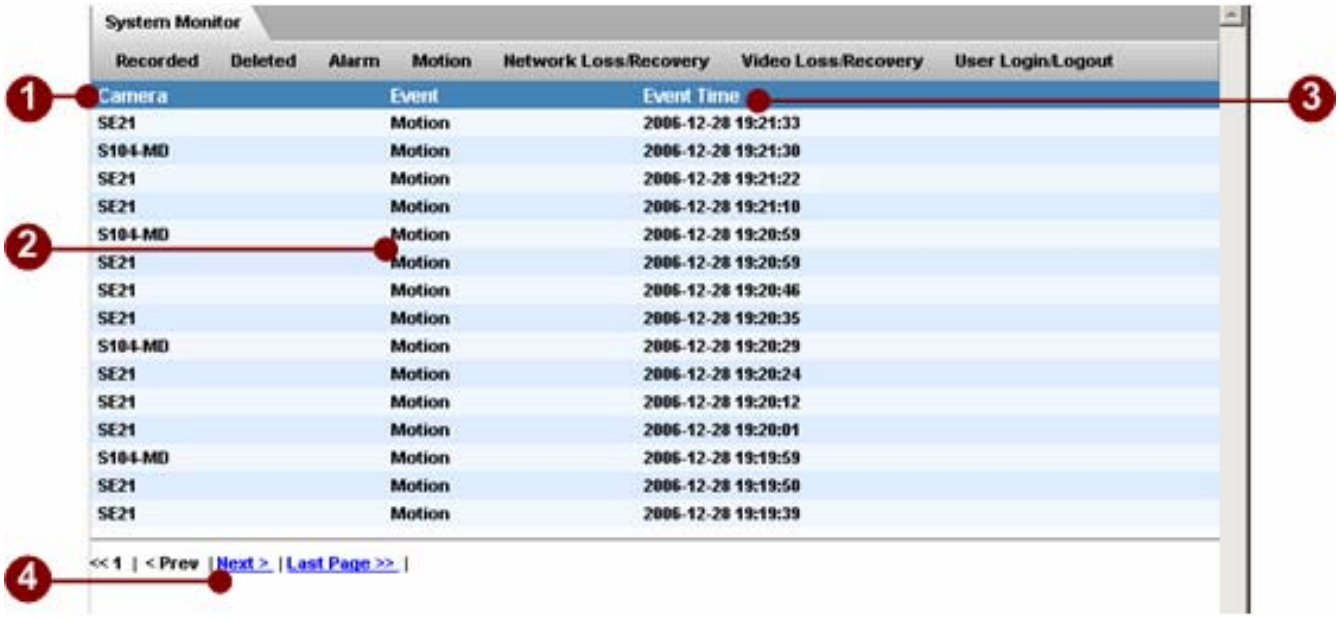


Figure 3-18 System Monitor - Motion

1. **Camera**: Camera Name
2. **Event**: Motion type
3. **Event Time:** The time of the occurrence of the event
4. **Page Indicator:** Navigate through the record set, including first page, last page, previous page, next page

System Monitor – Network Loss/Recovery

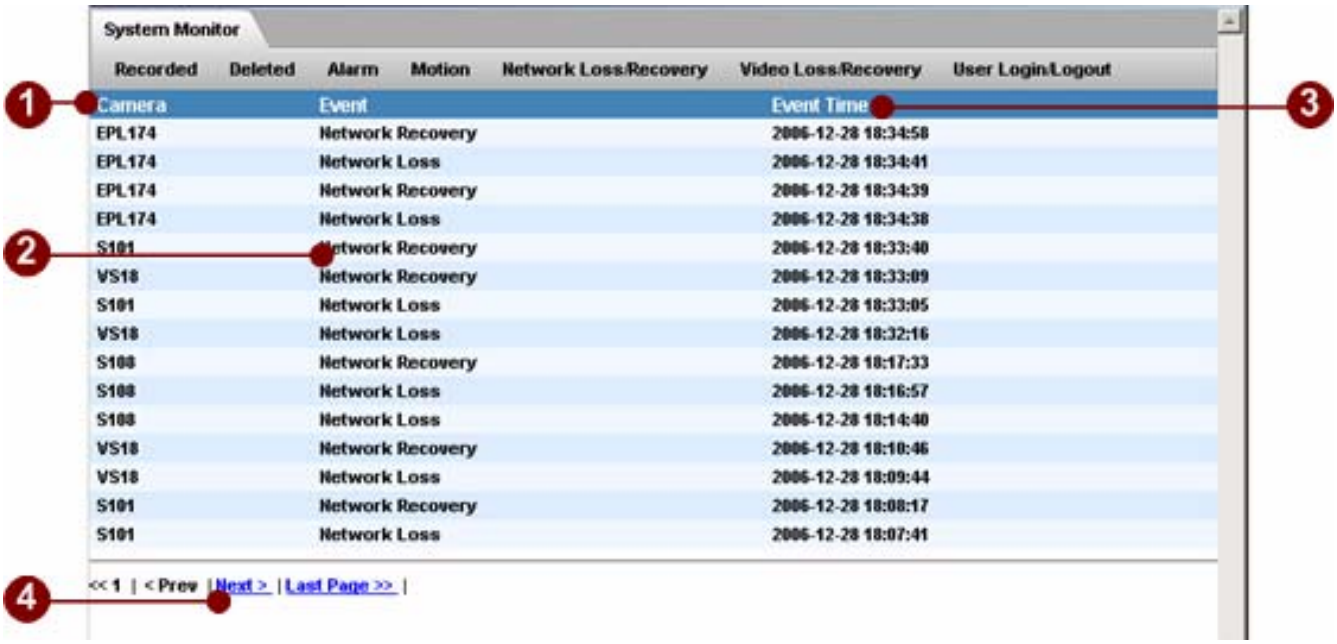


Figure 3-19 System Monitor – Network Loss/Recovery

1. **Camera**: Camera Name
2. **Event**: Network status, including **Network Loss** and **Network Recovery**
3. **Event Time:** The time of the occurrence of the event
4. **Page Indicator:** Navigate through the record set, including first page, last page, previous page, next page

System Monitor – Video Loss/Recovery

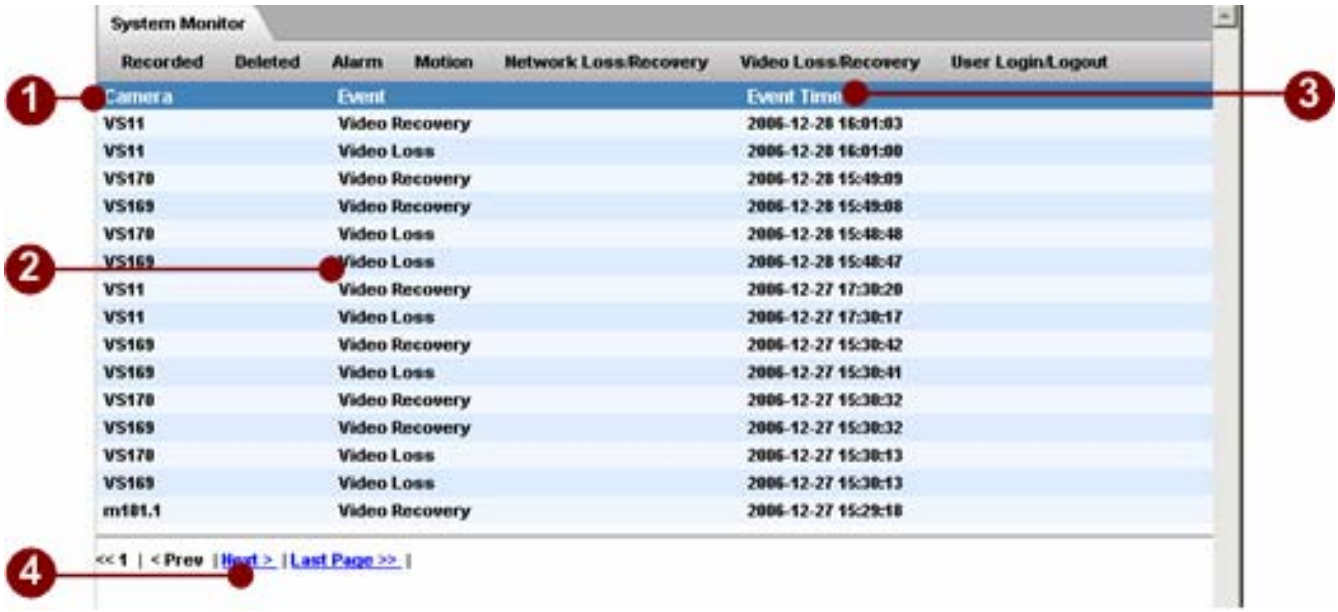


Figure 3-20 System Monitor – Video Loss/Recovery

1. **Camera**: Camera Name
2. **Event**: Network status, including **Network Loss** and **Network Recovery**
3. **Event Time:** The time of the occurrence of the event
4. **Page Indicator:** Navigate through the record set, including first page, last page, previous page, next page

Speak and Broadcast

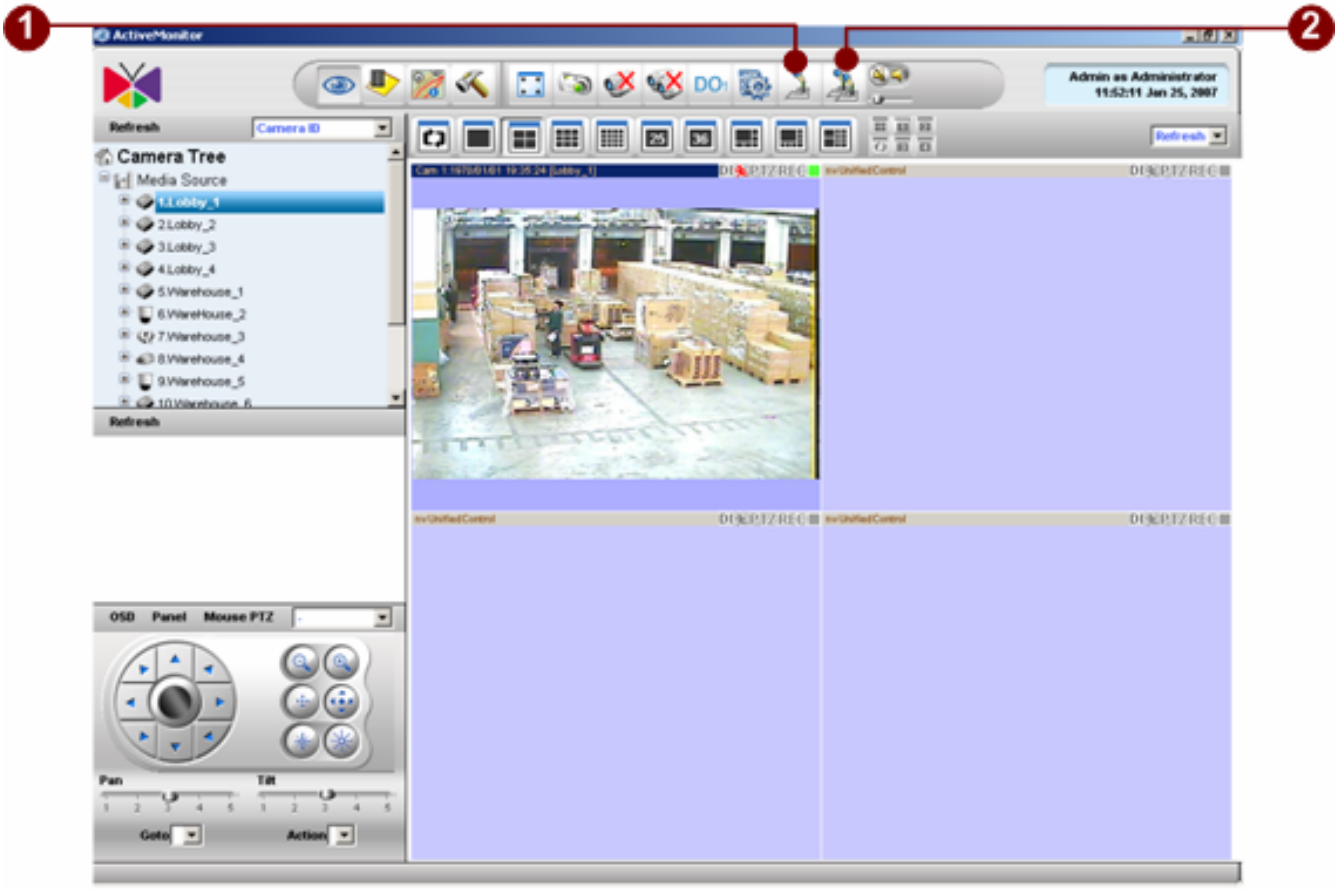


Figure 3-21 Talk and Broadcast button

1. **Speak**: Pressing this icon enables audio transmission to the selected video device; un-pressing it disables the transmission.
2. **Broadcast**: Pressing this icon enables audio transmission to all video devices that appear in this layout; un-pressing it disables the transmission.

IMPORTANT: Note that, in order to enable this function, make sure the device is equipped with 2-way audio function. **Speak** is a 1-to-1 communication while **Broadcast** will transmit the audio to all clients that are connected with live video feed.

Volume Control

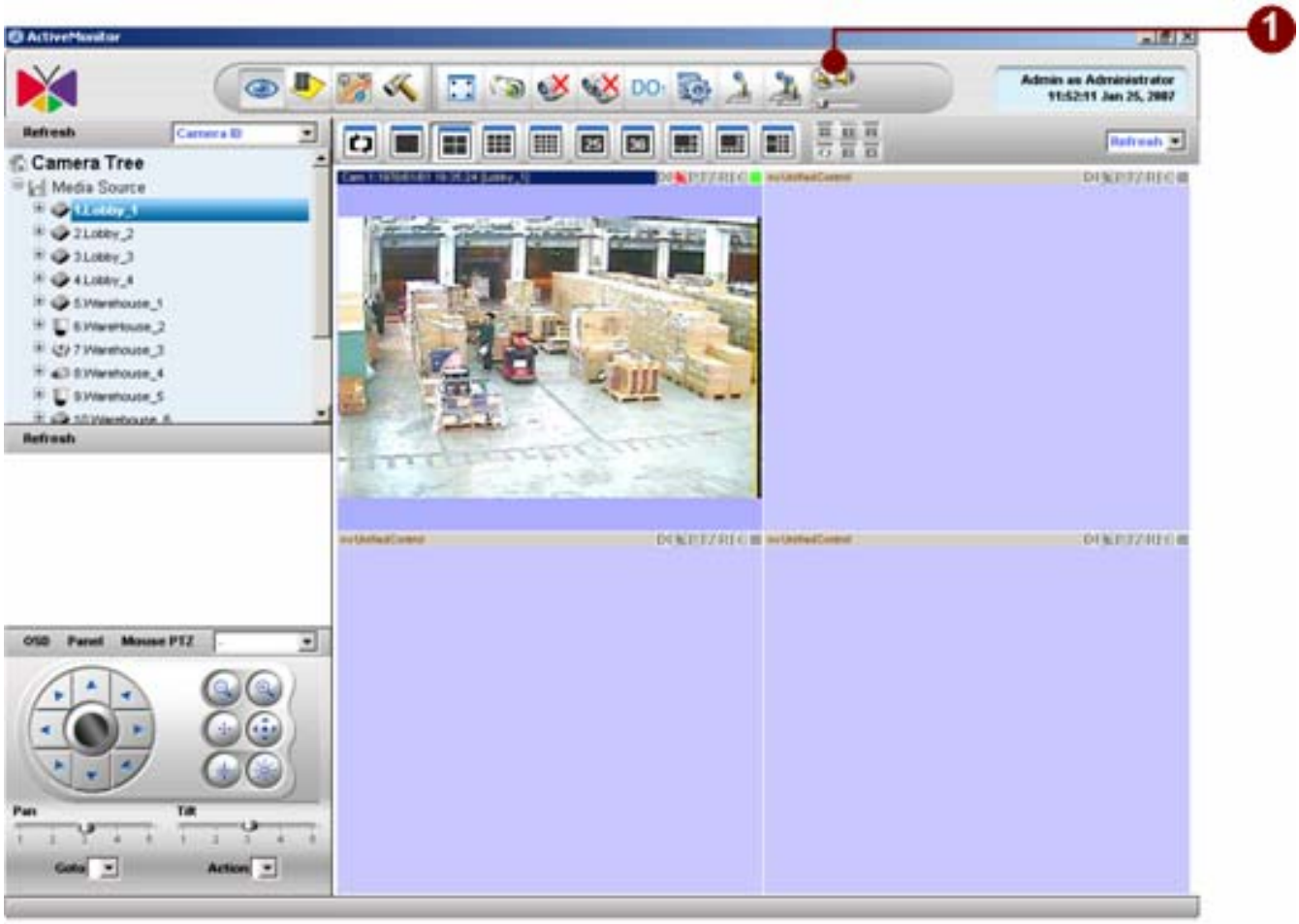


Figure 3-22 Volume Control

1. **Volume Control**: turn on/off and adjust the volume.

Mute On

Figure 3-23 Mute On

Mute Off

Figure 3-24 Mute Off

Adjust Volume

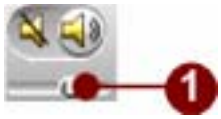


Figure 3-25 Adjust Volume

Camera Panel

Camera List

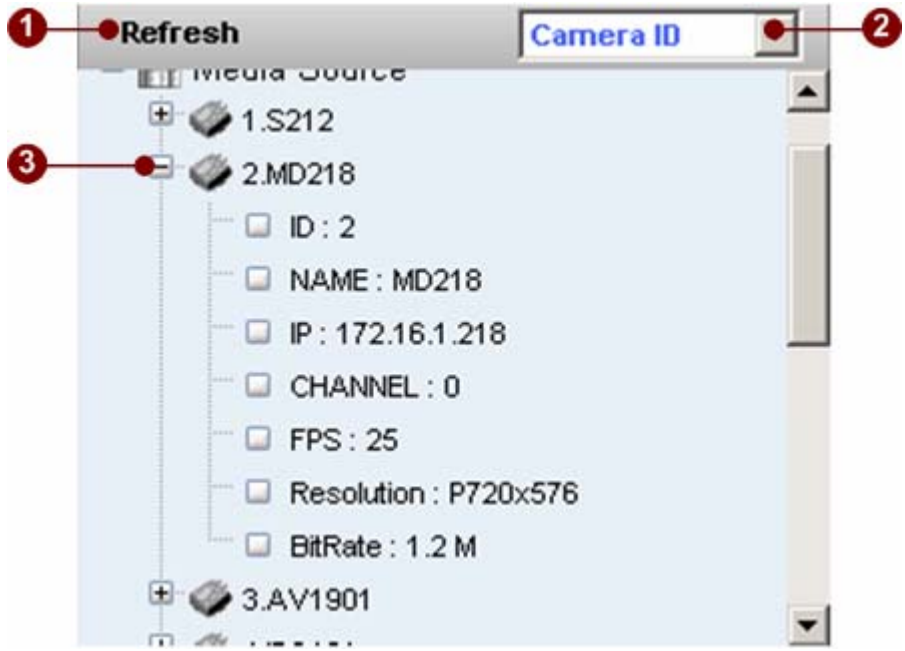


Figure 3-26 Camera List

1. **Refresh button**: Pressing this button reveals the newest changes made with Active Setup. Closing and re-opening the Active Monitor will have the same effect.
2. **Sort selection**: Sorts the tree in different categories and priorities. User has a choice of Camera ID, Model Name, Group, Resolution, and IP Address.
3. **Camera list**: The Camera List serves two functions:
   i. Expanding each device shows Camera Information, including Camera ID, Name, Channel ID, FPS, Resolution and Bit-Rate.
   ii. Clicking and dragging the device icon to a video window on the right shows video from that device.

Channel Layout Manager

Window Layout Selection

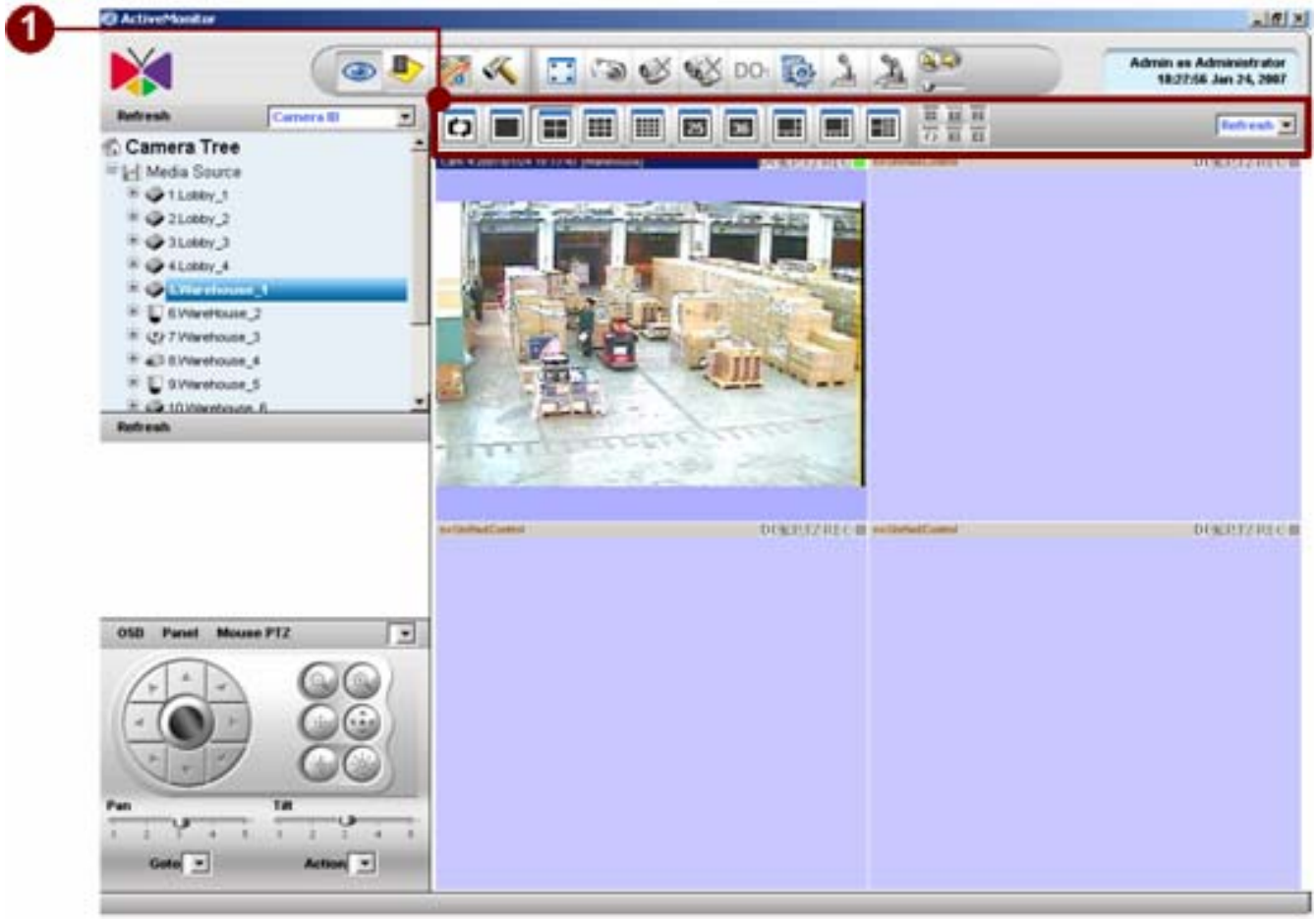


Figure 3-27 Layout bar

1. **Layout selection bar**: These icons manage how the user would like the different video channels to be viewed.

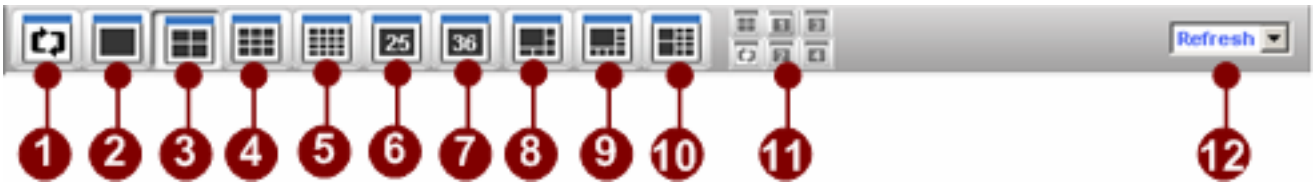


Figure 3-28 Layout Select bar

1. **Patrol**: See **Layout Tour** for details.
2. **1-Window View**: Shows a single channel; video is not expanded if maximum resolution of the

source video is reached.

3. **4-Window View**: Shows a maximum of 2x2 video channels at once.
4. **9-Window View**: Shows a maximum of 3x3 video channels at once.
5. **16-Window View**: Shows a maximum of 4x4 video channels at once.
6. **25-Window View**: Shows a maximum of 5x5 video channels at once.
7. **36-Window View**: Shows a maximum of 6x6 video channels at once.
8. **6-Window View**: Shows one video channel with a larger view, and 5 others at a lower resolution.
9. **8-Window View**: Shows one video channel with a larger view, and 7 others at a lower resolution.
10. **10-Window View**: Shows two video channels with a larger view, and 8 others at a lower resolution.
11. **Quad setting**: Controls layouts within the Quad Video Server if using one such as SED-2310 or SED-2320.
12. **Pre-Defined Layout**: Choose the layout that user wants to preview.

NOTE: The Quad setting buttons will only become active if the selected channel is defined as a quad in the camera settings.

Pre-defined Layout

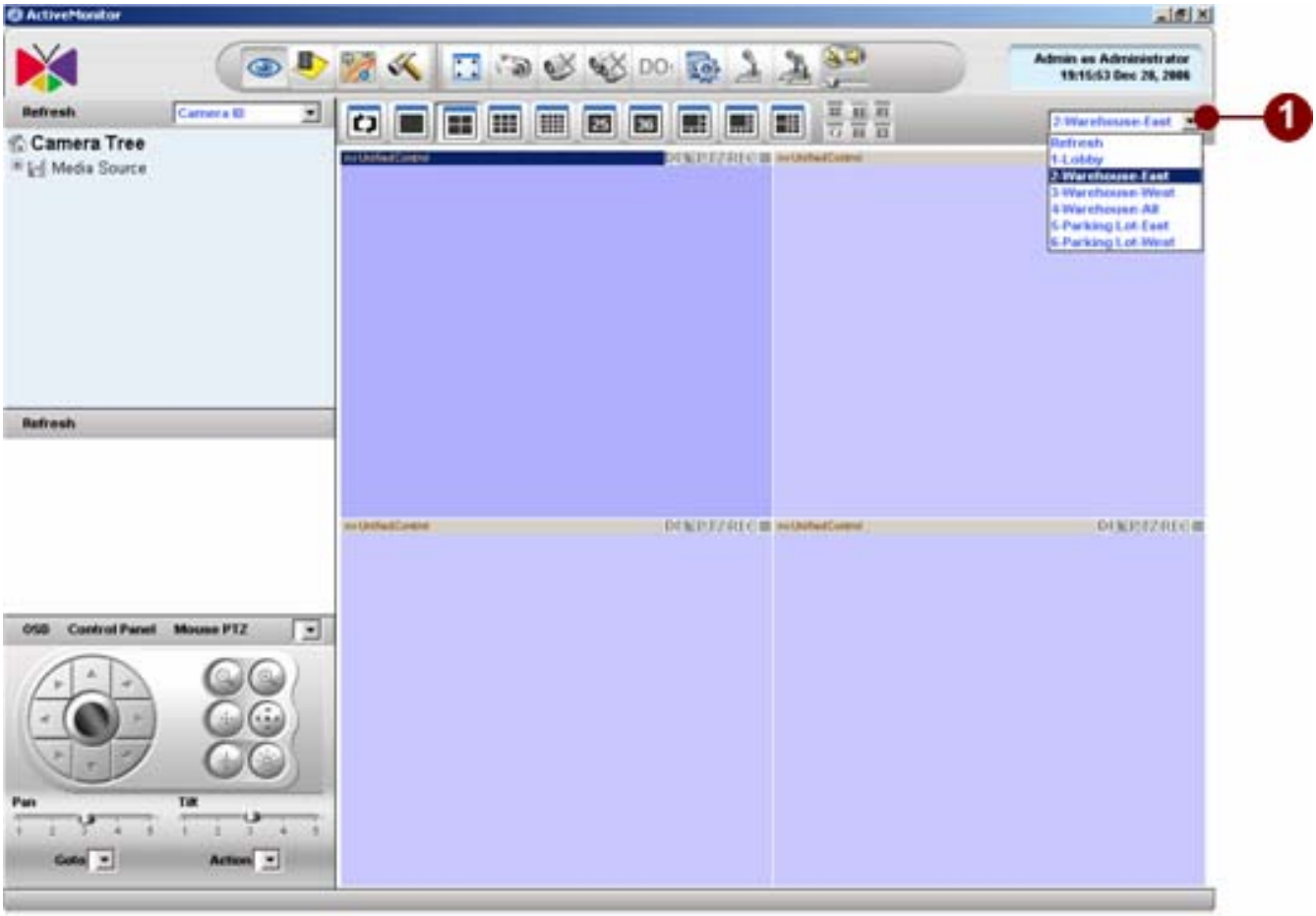


Figure 3-29 Select Predefined Layout

1. **Pre-defined layout options**: If User has pre-defined layouts in System Setup (See **Layout** for details), user will find them here. Selecting any one of them automatically brings up the layout as well as all video channels. Selecting "Refresh" will refresh the list should any layouts has been changed with Active Setup.

Hot-spot Window

The hot-spot window is designed to alert security officer for certain events. The security officer may simply double-click on any video window, that window will then be switched over with the one in hot-spot window. Also, user may setup the action to display video on the hot-spot window when certain event occurs.

Figure 3-30 Hot-Spot Window

1. **Hot-spot Window**: The upper left window in the Window Layout Manager is defined as the Hot-Spot Window.

NOTE: Double-clicking on another video window swaps video between the hot-spot window and the indicated window.

NOTE: Please refer to [**Active Setup**] -> [**Camera Setup**] -> [**Event Manager**] on how to setup hot-spot window as the event display video window.

Layout Patrol

Figure 3-31 Patrol button

1. **Patrol**: Clicking on this icon runs a pre-defined layout patrol sequence. This setting can be found in Active Setup. Clicking on the Patrol button once brings up a sub-menu, which allows user to choose any particular sequence to patrol. Selecting "**Cancel**" in the sub-menu stops the patrol.

NOTE: Depending on the power of the computer used, patrolling between each layout takes a certain amount of time. While the video channels still load, user will not have access to much of the control, including the ability to Cancel the layout patrol. Please make sure the period between each layout is sufficient for all channels to complete loading, especially when the number of channels in a single layout is large.

Layout Patrol with Full Screen Mode

Figure 3-32 Full Screen Mode

The user may also perform layout patrol while in full screen mode. To do so, the user simply needs to:

1. Select and run layout patrol by clicking on the patrol button
2. Wait until all channels have completed loading, but before the next layout begins loading
3. Click on the full screen button.

To bring the user interface back out from full screen mode, simply press the **ESC** key.

Event List Panel

Event List

The user may find the Event List on the left hand side of the Active Monitor. Events due to different events are show on that list. Please see Figure 3-32 for example:

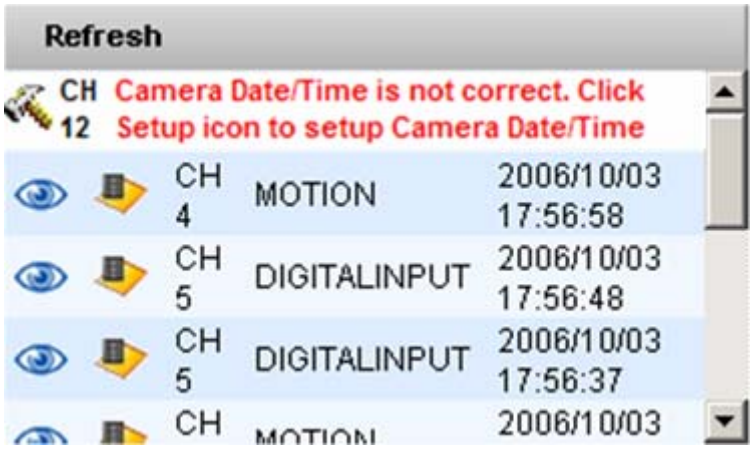

Refresh
CH 12 Camera Date/Time is not correct. Click Setup icon to setup Camera Date/Time
CH 4 MOTION 2006/10/03 17:56:58
CH 5 DIGITALINPUT 2006/10/03 17:56:48
CH 5 DIGITALINPUT 2006/10/03 17:56:37
CH 2006/10/03

Figure 3-33 Event List

NOTE: The Event List is not saved while Active Monitor is not active.

NOTE: In the event panel, a new event called "Camera Date/Time is not correct. Check Setup icon to setup Camera Date Time". If this happens, it means that specific camera's date/time is not setup correctly, this will affect recording, searching and playback. Please click icon to setup camera date/time accordingly.

Check Event Status

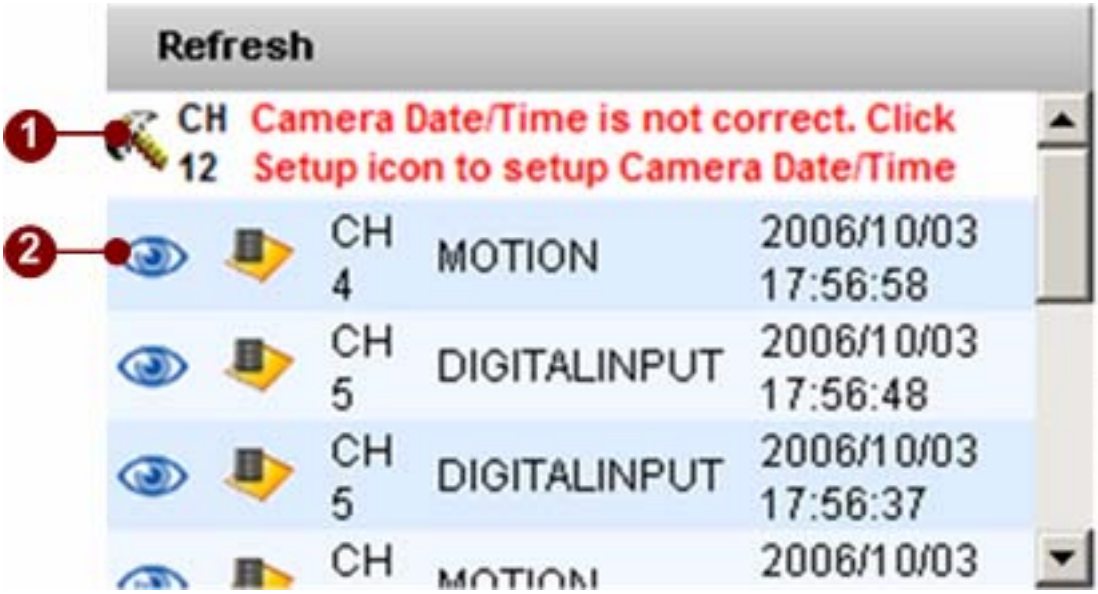

Refresh
1
CH 12 Camera Date/Time is not correct. Click Setup icon to setup Camera Date/Time
2
CH 4 MOTION 2006/10/03 17:56:58
CH 5 DIGITALINPUT 2006/10/03 17:56:48
CH 5 DIGITALINPUT 2006/10/03 17:56:37
CH MOTION 2006/10/03

Figure 3-34 Event Status

1. **Camera Setup Notification**: This event is to notify that user need to configure camera configuration.

Clicking on the icon to setup camera date/time.

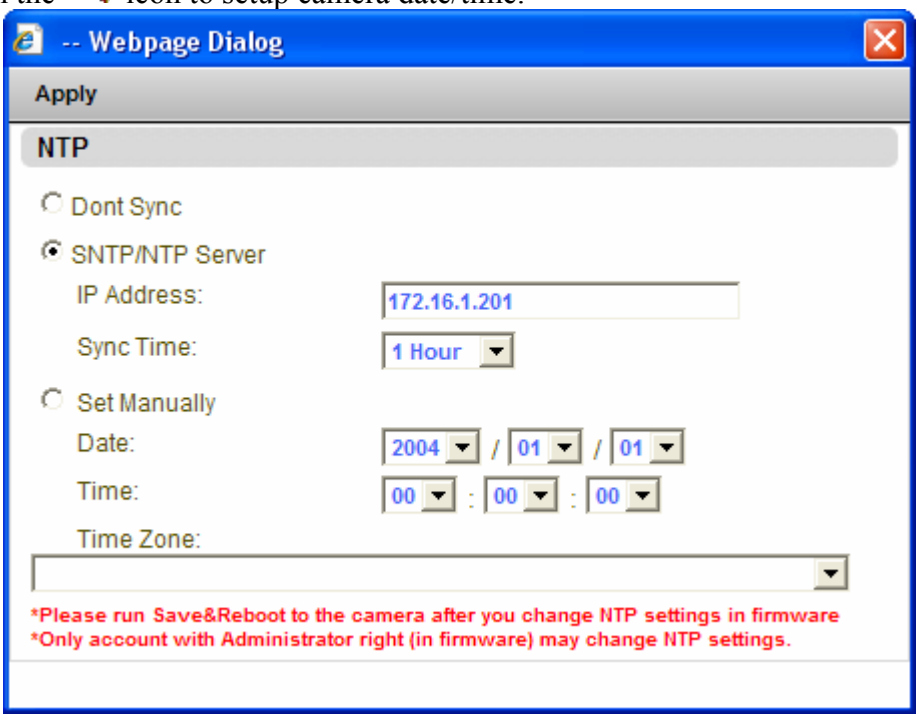


Figure 3-35 Camera Date/Time Setup

2. **Event Status**: The events are listed by Channel Number, Type and Time. To view a video clip related to a particular event, click on the "Eye" icon.

Clicking on the icon brings up video on a pop-up mini-preview window

Clicking on the icon brings up file information associated with that particular event. If the file has been recorded and saved, the video archive will also be played on a pop-up mini-playback window.

PTZ Panel

PTZ Operation

PTZ controls can be found on the bottom left hand side of the Active Monitor. Most of functions seen below are disabled until PTZ control setup for the particular camera or video server is completed and enabled. Please consult **PTZ** for setting up PTZ.

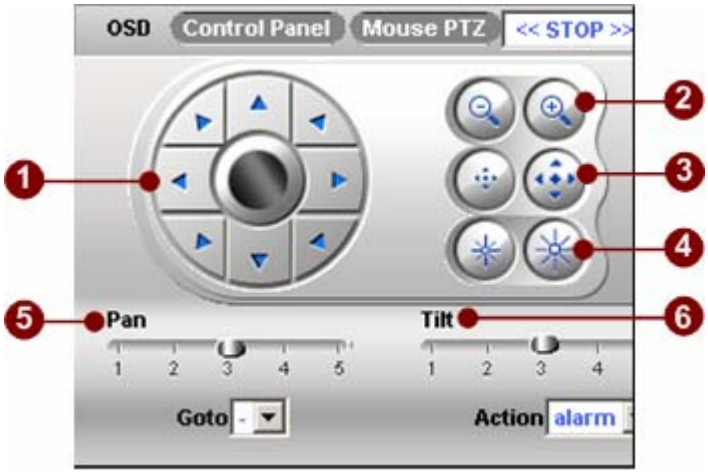


Figure 3-36 PTZ Operation

1. **Pan-Tilt Control**: Contains 8-way Pan-Tilt operation
2. **Zoom Control:** Click to zoom out. Click to zoom in
3. **Focus Control:** Click to focus near. Click to focus far.
4. **Iris Control:** Click to set open iris. Click to set close iris.
5. **PAN Speed:** Adjust PAN speed. Rating 1 to 5. Higher numbers indicate faster Pan speed. The actual angular speed varies from protocol to protocol. Click on a number on the bar to select the desired speed
6. **Tilt Speed:** Adjust TILT speed. Rating 1 to 5. Higher numbers indicate faster Tilt speed. The actual angular speed varies from protocol to protocol. Click on a number on the bar to select the desired speed

NOTE: Note that, different speed dome protocol may vary on the 8-way Pan-Tilt operation. CAM-6500's Dynacolor protocol supports 4-way Pan-Tilt operation

OSD Operation

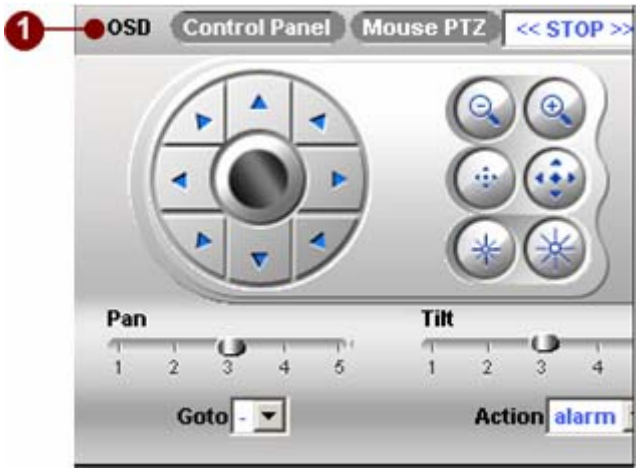


Figure 3-37 OSD Operation

1. **OSD**: Click to enable or disable on-screen menu of the PTZ camera, if applicable. Button appears pressed when enabled, and appears released when OSD is disabled. Once enabled, use the arrow keys to operate the menu.

Control Panel Support

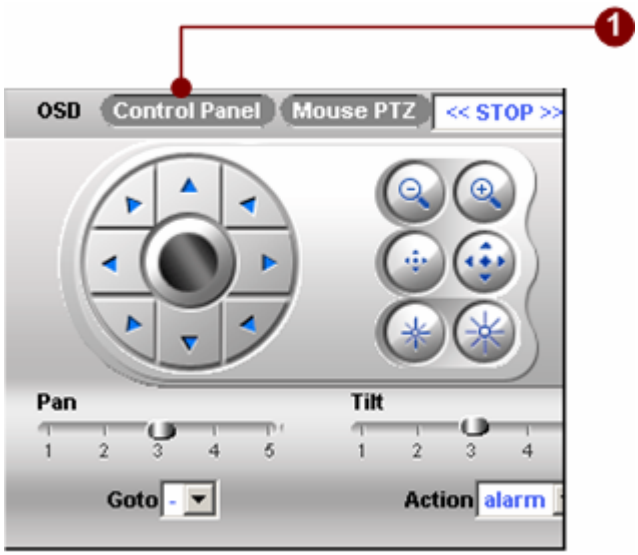


Figure 3-38 Control Panel Operation

1. **Control Panel**: Click to enable or disable control panel support. Control panel needs to connect on the serial port (RS-232) on the computer running ACTi NVR v2.0. Please refer to **Joystick** section on Control Panel and Serial Port setup.

IP Joystick Support

ACTi NVR v2.0 also supports IP Joystick connected on the USB port. Please refer to **Joystick** section on IP Joystick button setup.

IMPORTANT: Note that the IP Joystick needs to be plugged into the USB port ***before*** ACTi NVR v2.0 starts.

Mouse PTZ

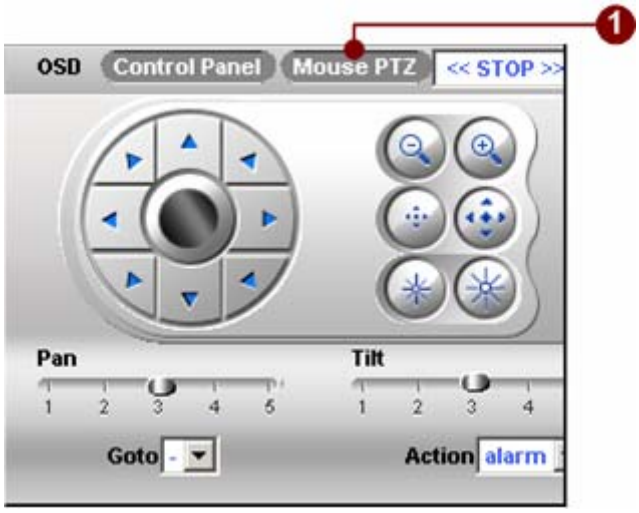


Figure 3-39 Mouse PTZ Operation

1. **MousePTZ**: Click to enable or disable mouse PTZ for the selected the camera. Button appears pressed when enabled, and appears released when mouse PTZ is disabled. Once enabled, use the arrow keys to operate the menu.

TIP: Mouse PTZ works under full-screen mode as well. Press F12 may enable full screen mode.

PTZ Preset Tour and Scan

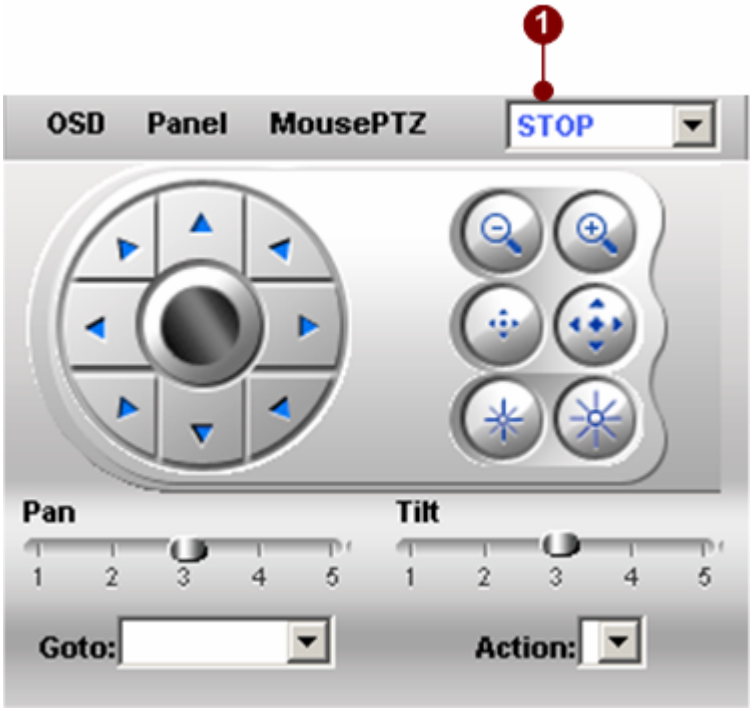


Figure 3-40 PTZ Preset Tour and Scan

1. **PTZ Preset Tour**: Click to select the PTZ Preset Tour user would like the PTZ to cycle through. Selecting "STOP" as shown in the dropdown menu stops the tour. Please see **Preset Tour** for setting up Preset Tours. Under this selection, user can find Auto Scan on and off as well.

Goto Preset Position

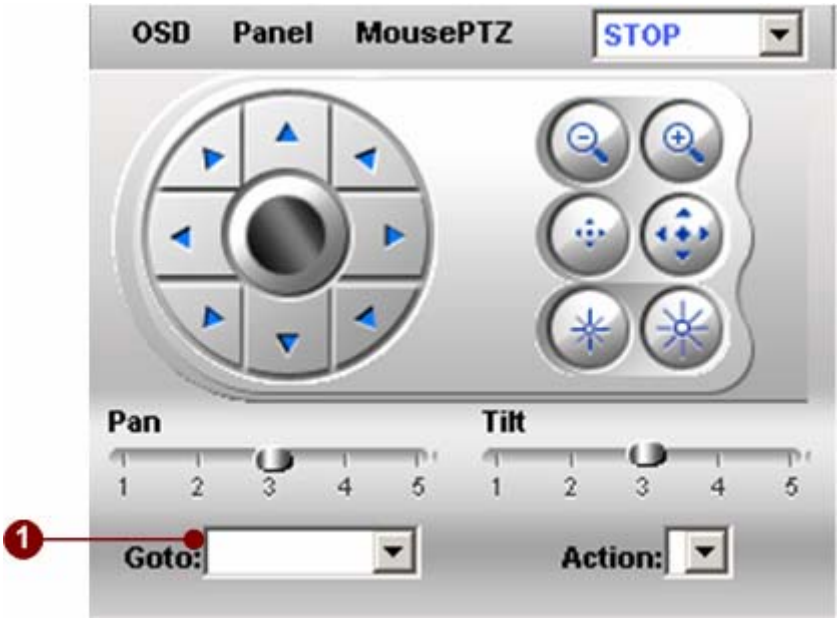


Figure 3-41 Goto Preset Position

1. **Goto**: This moves the PTZ camera to a certain pre-defined point. User may set up the preset points by going to the PTZ Preset page. See **PTZ Preset** for more details.

NOTE: Note that the preset position is listed in the description.

Run User-defined PTZ Actions

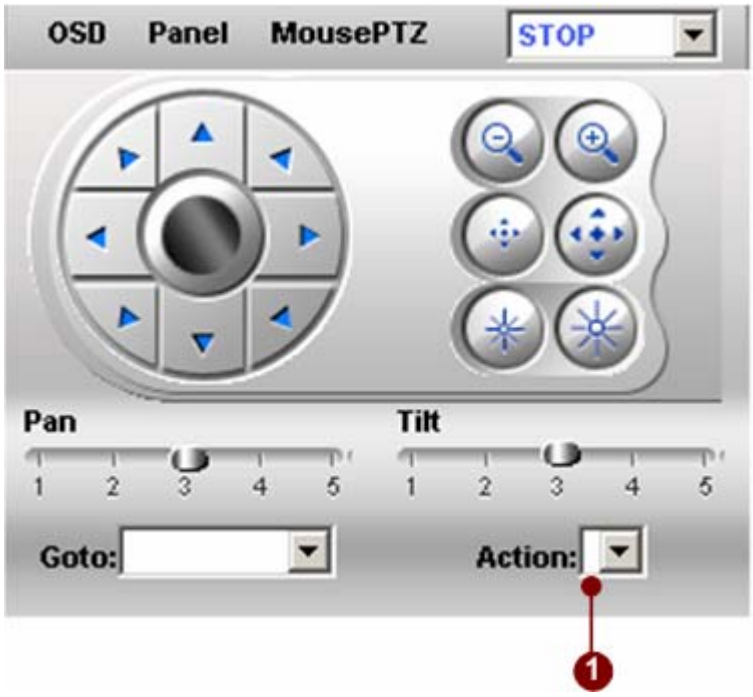


Figure 3-42 Goto Preset Position

1. **PTZ Action**: Execute user-defined commands. Please refer to **PTZ** section for user-defined PTZ command setup.

4. Archive Player

Introduction

The Archive Player (ActivePlayer) is the application designed to perform video playback for recorded clips. It allows for up to 36 concurrent, synchronized video preview windows, including a variety of preview modes.

Advanced features of the Archive Player include time-bar searching, different camera synchronization methods, event searching, backup playback, and many more. This section explains the interface in detail, as well as gives instructions for using these advanced functions.

Overview

The section describes the mechanism on how to search ACTi's IP surveillance products on network. With this mechanism, user can locates the devices on the network, then use URL commands to operate or manage those devices.

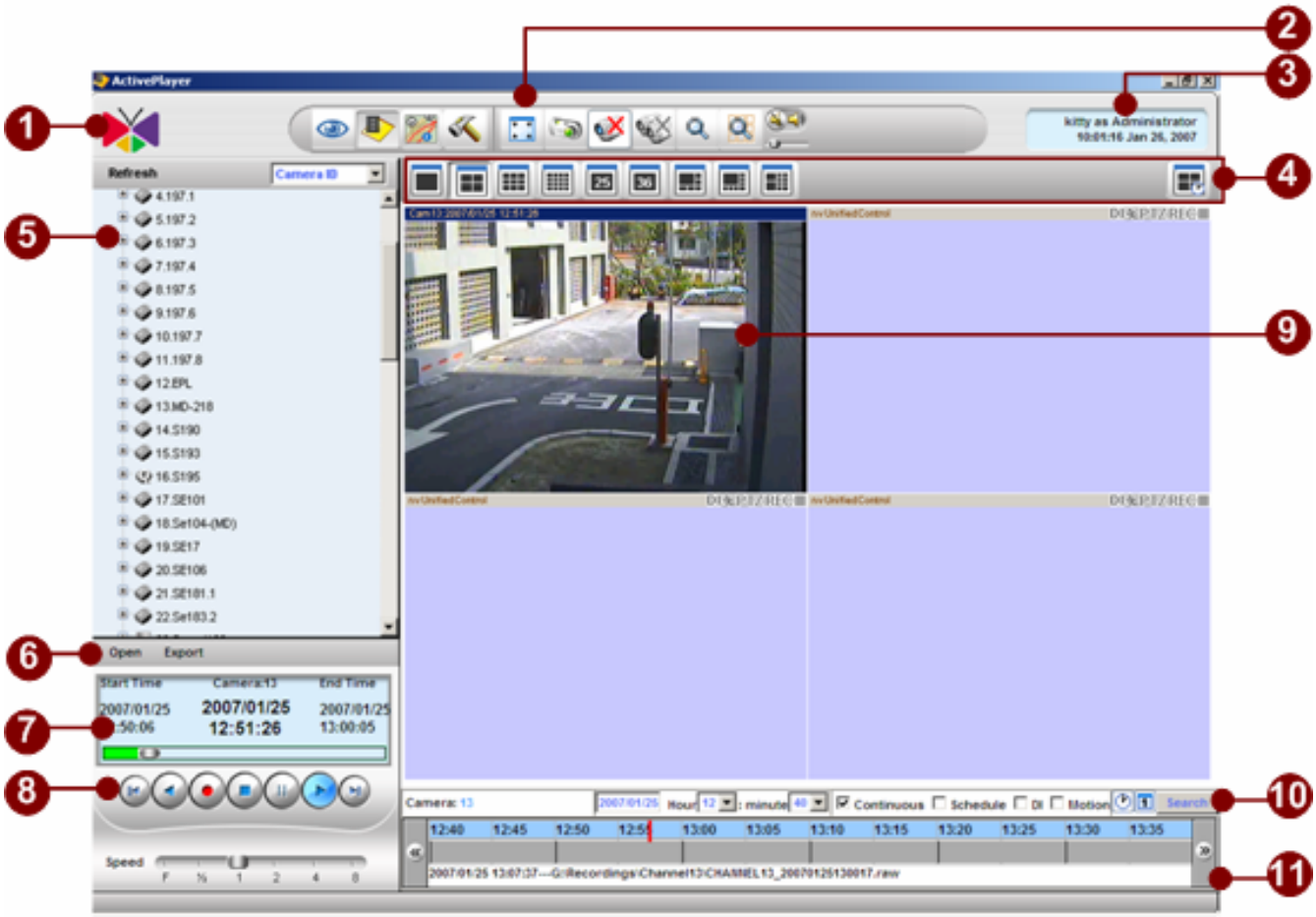


Figure 4-1 Archive Player Interface

1. **Logo**: Clicking the logo brings up the About Us dialog box which contains software version, system version and company information.
2. **Archive Player Toolbar**: Contains the buttons to operate in Archive Player application
3. **Personal Profile**: Clicking this section brings up Personal Profile setting; user may change password and select preferred Language.
4. **Layout Manager**: Control the various window layout
5. **Camera Panel**: Displays camera tree
6. **Open/Export Playback File** : Displays the Date and Time.
7. **Playback Date/Time Information** : Displays the Date and Time.
8. **Playback Panel**: Playback operations

9. **Video Window**: PTZ operations
10. **Search Manager**: Controls the various window layout
11. **Time Bar**: Each video window displays live view from one video source from camera panel.

Playback Operation

Execute “ActivePlayer.exe” or click “Playback” icon from the menu bar above other applications to bring up the Playback screen.

Archive Player Toolbar

Figure 4-2 Active Monitor Toolbar

1. **Active Monitor**: Click this button to go to the Active Monitor application.
2. **Archive Player**: Click this button to go to the Archive Player application.
3. **Active E-Map**: Click this button to go to the Active E-Map application.
4. **Setup**: Setup the System, Camera and E-Map.
5. **Full Screen**: Click to bring the video into full-screen mode. To bring the controls back, press ESC.
6. **Snapshot**: Takes a single screenshot at maximum resolution for the selected video only. The screenshot is saved as an JPG file in the Recording Path defined in the Recording of Camera Setup. Please refer to **Recording** section for details.
7. **Disconnect A Camera**: Click to stop video playback for the selected window.
8. **Disconnect All Camera**: Click to stop video playback for all preview windows.
9. **Search**: Click to search recording files.
10. **Snapshot View**: Click this button to find out snapshot.
11. **Volume Control**: turn on/off and adjust the volume.

Full Screen Mode (F12)

Figure 4-3 Fullscreen button

1. **Full-screen**: Click this button to bring the video into full-screen mode. To bring the controls back, press ESC.

NOTE: Full-screen maximizes the entire layout of videos instead of just the selected window. It will also not expand the video should the size of the window exceeds the maximum resolution of the video.

NOTE: User can also use **F12** to invoke this function. To stretch the video to fit the window, user can use **F11** function key to toggle this function.

Figure 4-4 Full Screen Window

Create Snapshot (F7)

Figure 4-5 Create Snapshot

1. **Snapshot**: Takes a single screenshot at maximum resolution for the selected video only. The screenshot is saved as an JPG file in the Recording Path defined in the Recording of Camera Setup. Please refer to the **Recording** section for details.

Disconnect a Channel

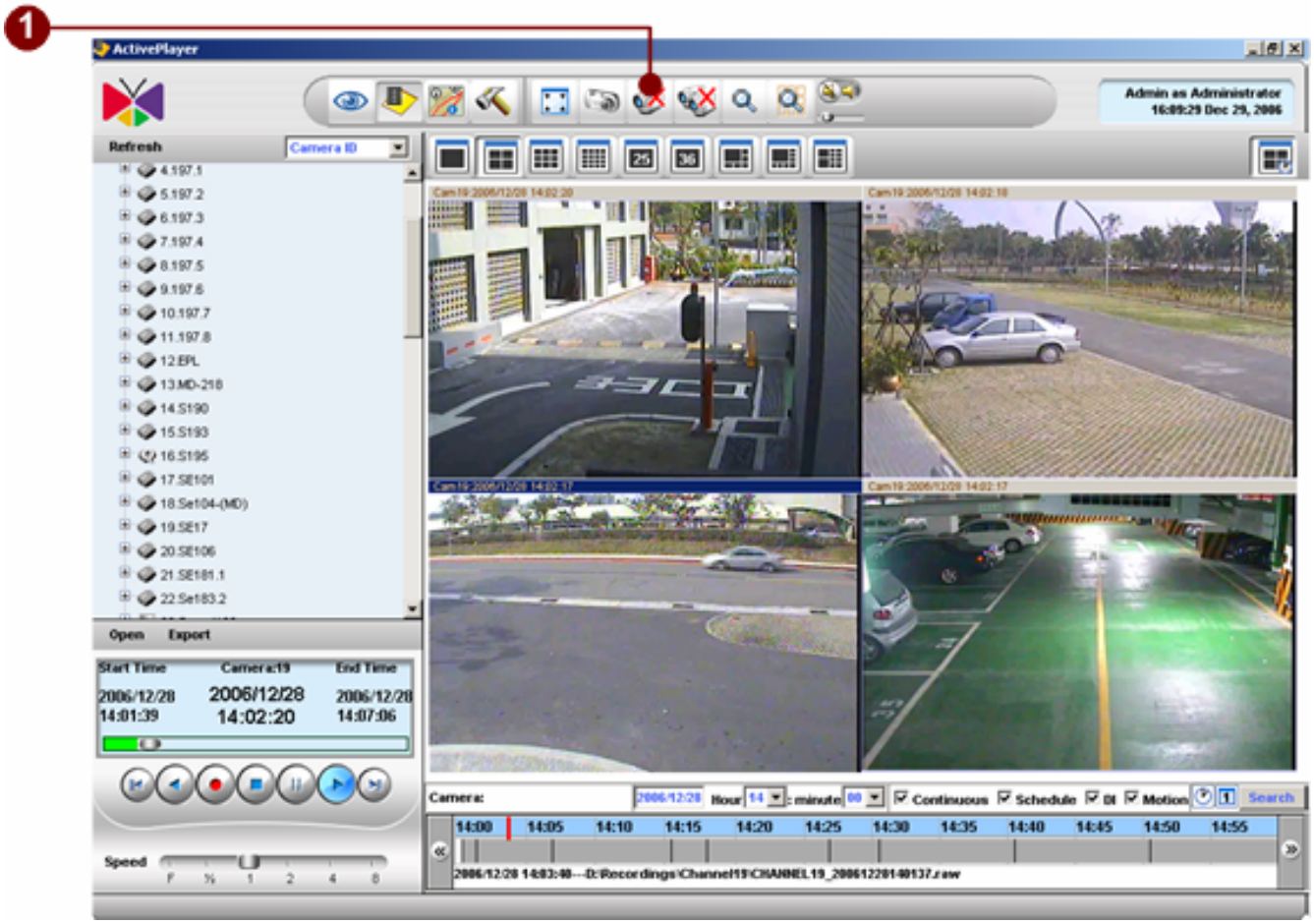


Figure 4-6 Disconnect A Channel

1. **Disconnect A Channel**: Click this button to stop video streaming for the selected window.

Disconnect All Channels

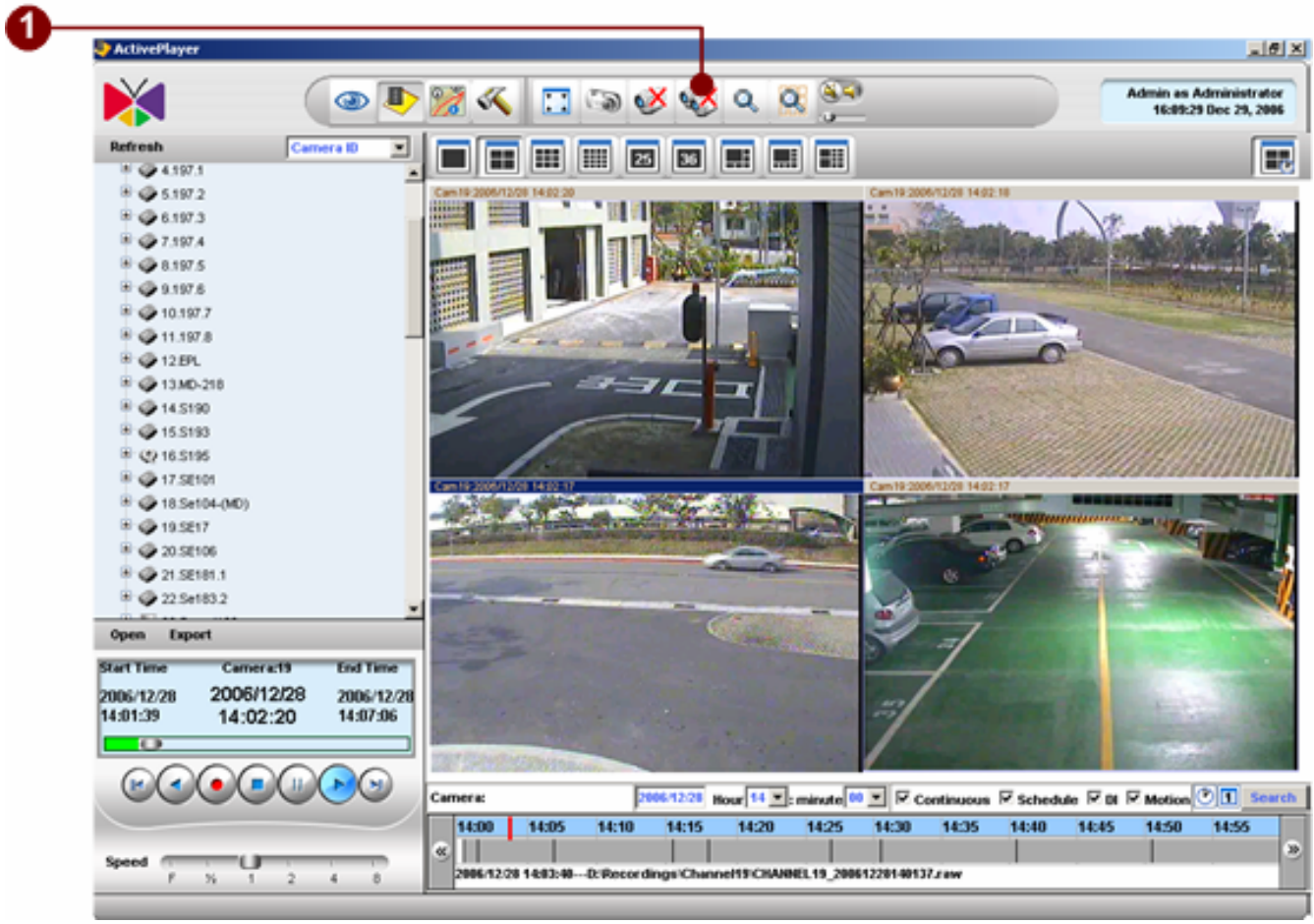


Figure 4-7 Disconnect All Channels

1. **Disconnect All Channel**: Click this button to stop video streaming for the selected window.

Search Event

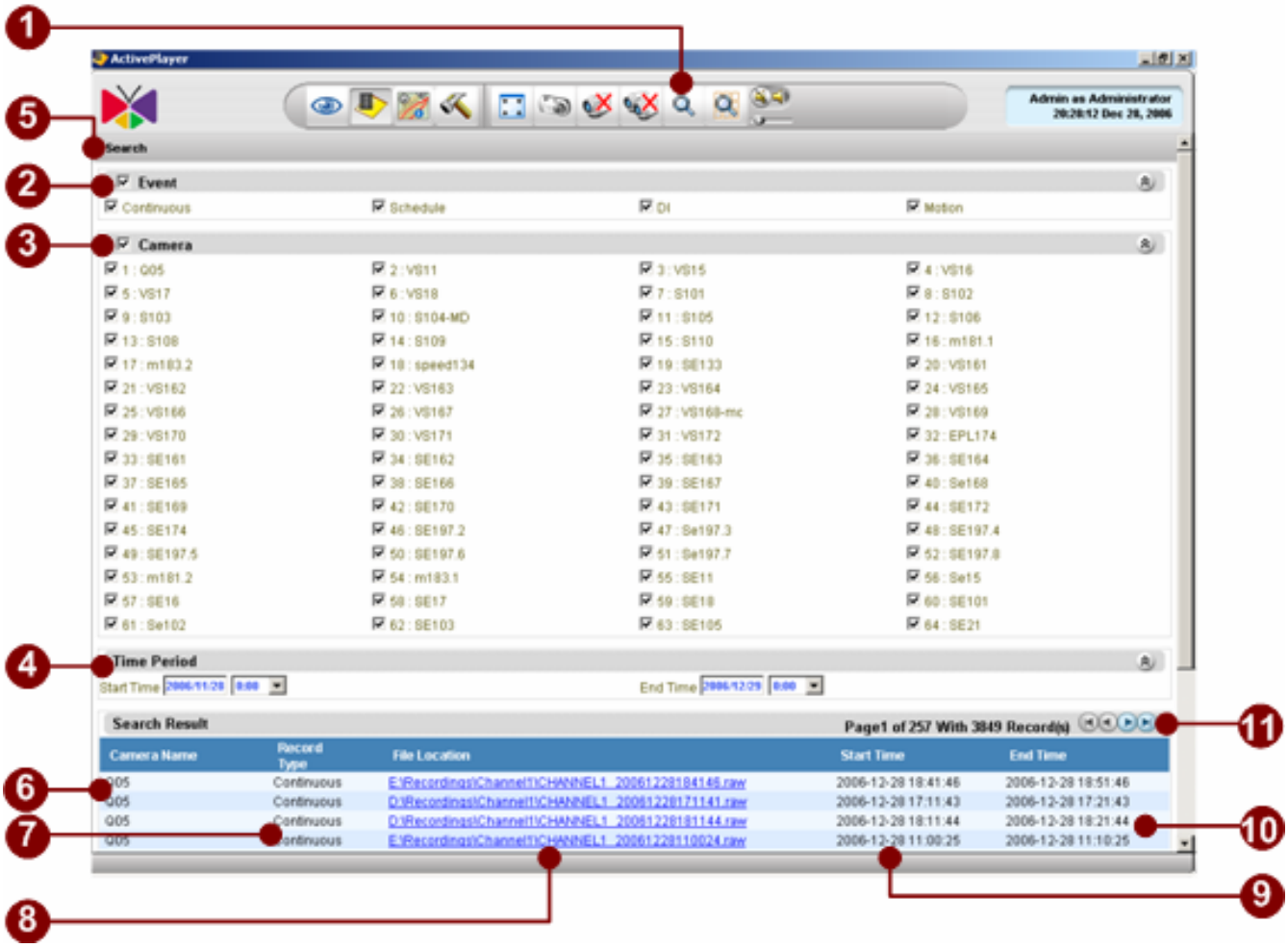


Figure 4-8 Search Event Listing

1. **Event Search Icon**: Click to show the manual search page.
2. **Choose the Event Type**: After selecting the types of events, cameras, and the search begin and end time, clicking on the Search button shows all that can be found on the database. Clicking the link found plays that file as a whole.
3. **Choose the Camera**: Click to show the manual search page.
4. **Time Period:** Start date / time and end date / time
5. **Search Button**: Click to show the manual search page.

   Search Listing of Camera Name:
6. **Camera Name**: Displays the camera name that matches the search criteria
7. **Recording Type**: Click to show the manual search page.
8. **File Location**: This shows the file save path, user can click it to playback file.
9. **Start Time**: Displays start date/time of the video clip that matches the search criteria

10. **End Time**: Displays end date/time of the video clip that matches the search criteria
11. **Page Indicator**: User may traverse the listing to first, last, previous or next page.

After clicking, user can see the file information on the screen first, and it will auto playback when the file status is ready.

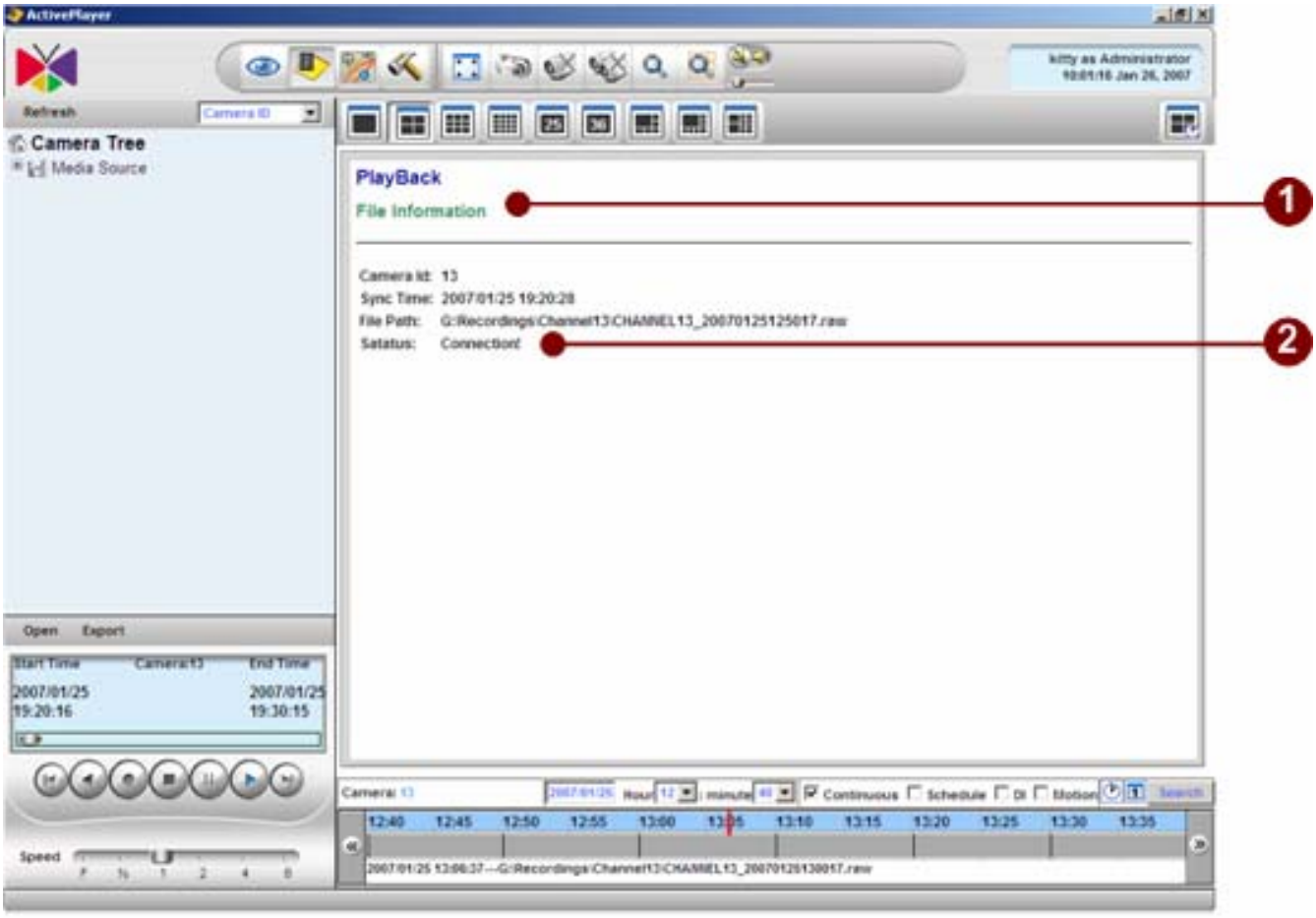


Figure 4-9 File Information

1. **Title Column**: Title
2. **Information Column**: This shows the file's information which is played now.

Snapshot Viewer

Search Snapshot Images

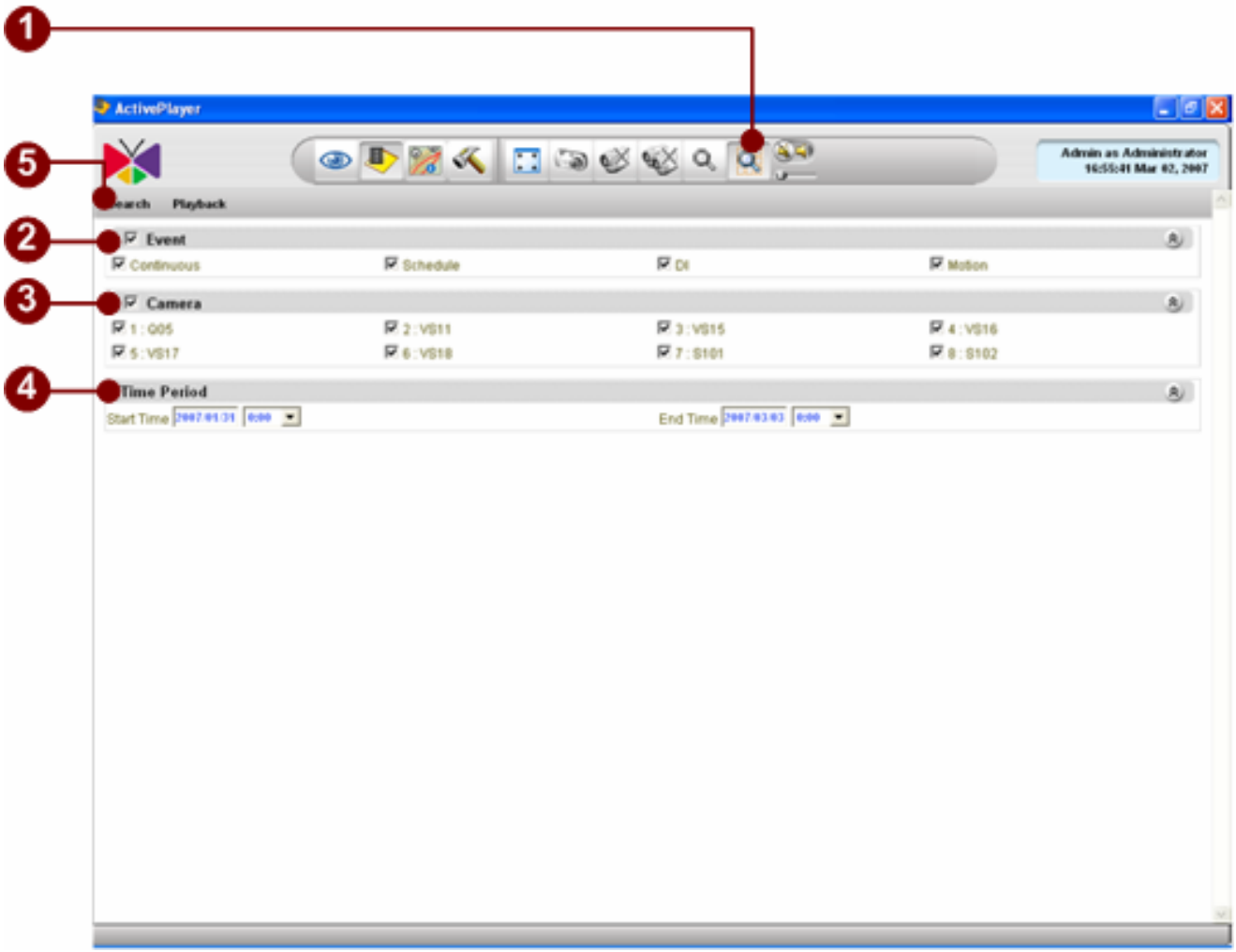


Figure 4-10 Snapshot Viewer Search Result

1. **Snapshot Viewer** Button: Click on snapshot viewer button to start the application
2. **Event Type**: Search event type
3. **Camera List**: Select camera list
4. **Time Period**: Specify start date time and end date time
5. **Search** Button: Click on Search button to view thumbnail image listing

Snapshot Preview Mode

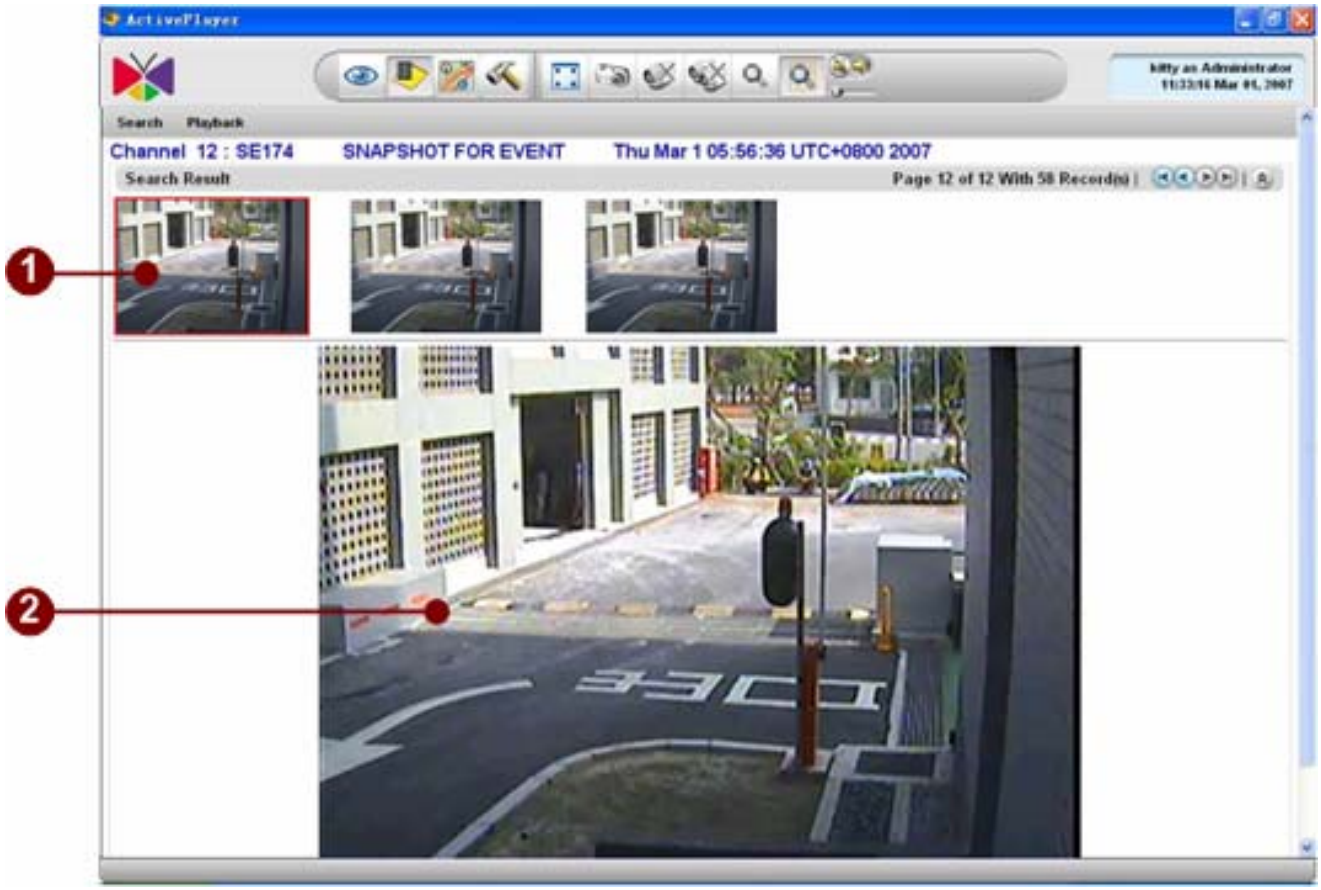


Figure 4-11 Snapshot Viewer with Thumbnail Images

1. **Thumbnail Preview**: thumbnail preview on the snapshot created
2. **Snapshot Preview**: When clicking on thumbnail preview image the original snapshot preview image with correct resolution will be displayed. When user click on the **Playback** button, the archive player interface will be brought up and starts playback the archive from the date / time the snapshot is created.

Volume Control

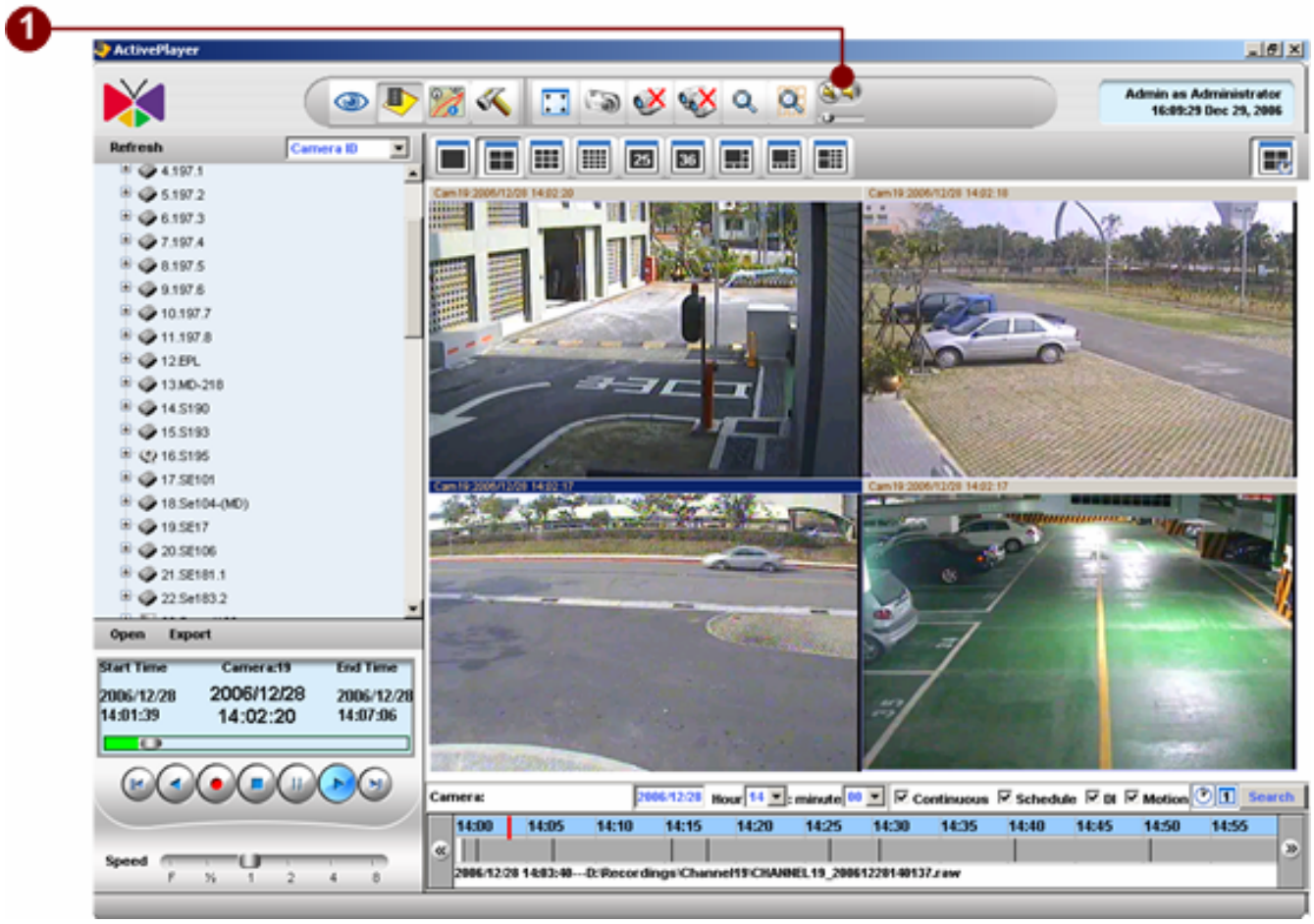


Figure 4-12 Volume Control

1. **Volume Control**: turn on/off and adjust the volume.

Mute On

Figure 4-13 Muto On

Mute Off

Figure 4-14 Muto Off

Adjust Volume

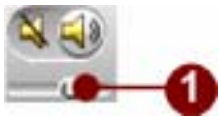


Figure 4-15 Adjust Volume

Playback Control Panel

Playback Operation

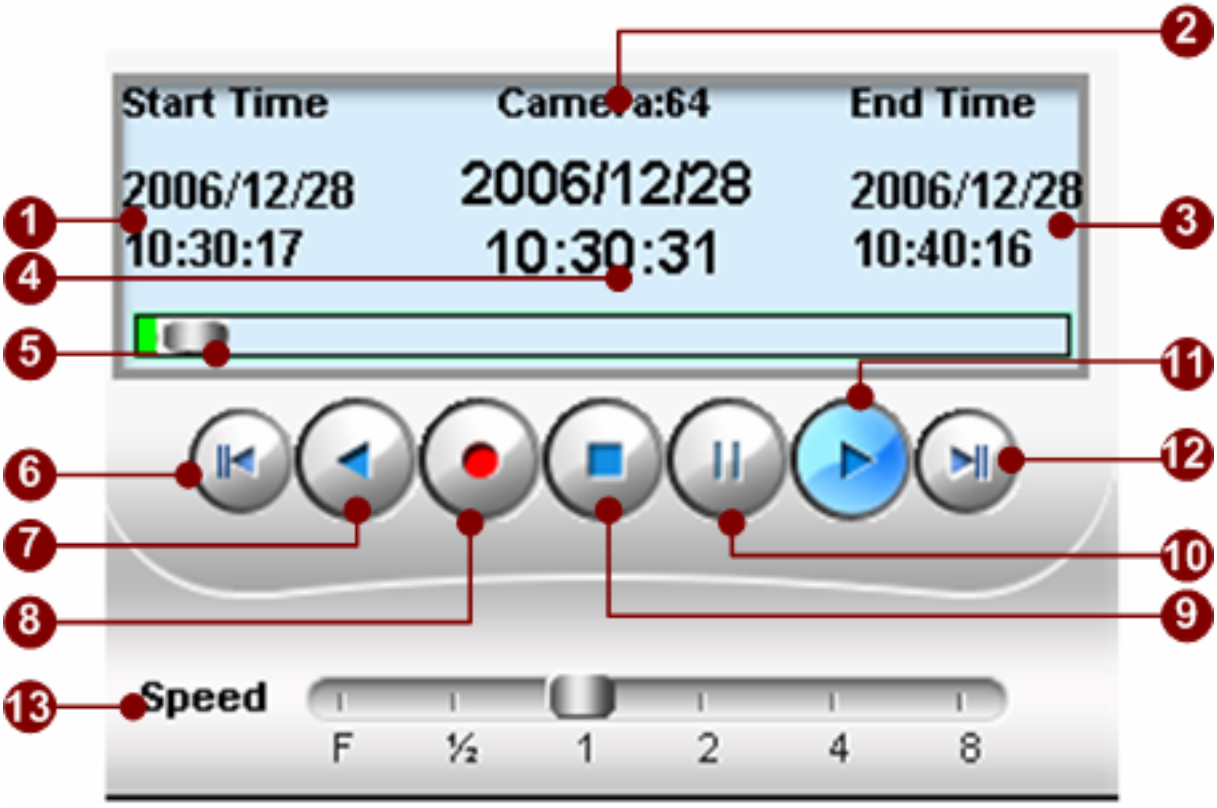


Figure 4-16 Playback Control Panel

1. **Start Time**: Shows when this recording starts.
2. **Camera Name**: Shows which camera records this file.
3. **Stop Time**: Shows when this recording ends..
4. **Playback Time**: Shows the time which this recording is being played.
5. **Playback Time Bar**: This displays the entire recording period. User can drag forward and backward to select when this recording is being played.
6. **Move to previous recording**: Click this button to play next recording.
7. **Play backward**: Click this button to play backward.
8. **Record**: This button enables user to select which section user wants. After clicking this button, the previous recording will be neglect, then a new recording will be created at this moment; click this button again to stop this new recording. the new recording will be stored in the same folder as the original file.
9. **Stop**: Click this button to stop playback.

10. **Pause**: Click this button to pause playback.
11. **Play**: Click this button to play forward.
12. **Move to the next recording**: Click this button to move to the next recording.
13. **Speed bar**: This bar shows how fast this recording is being played. User can click the button on this bar to play this recording faster or slower.

Play, Play Backward

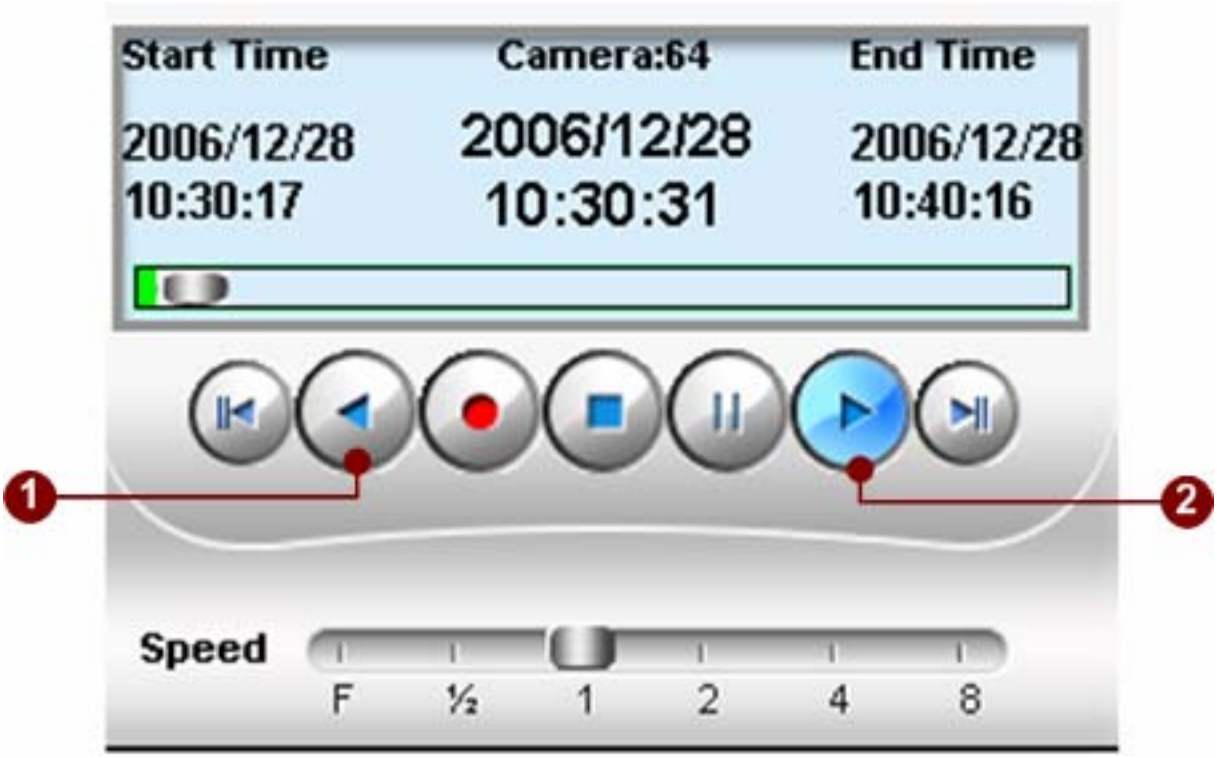


Figure 4-17 Play and Play Backward

To play backwards, click the **Play backward** button. There is no need to click **Pause** button.

Speed Setting

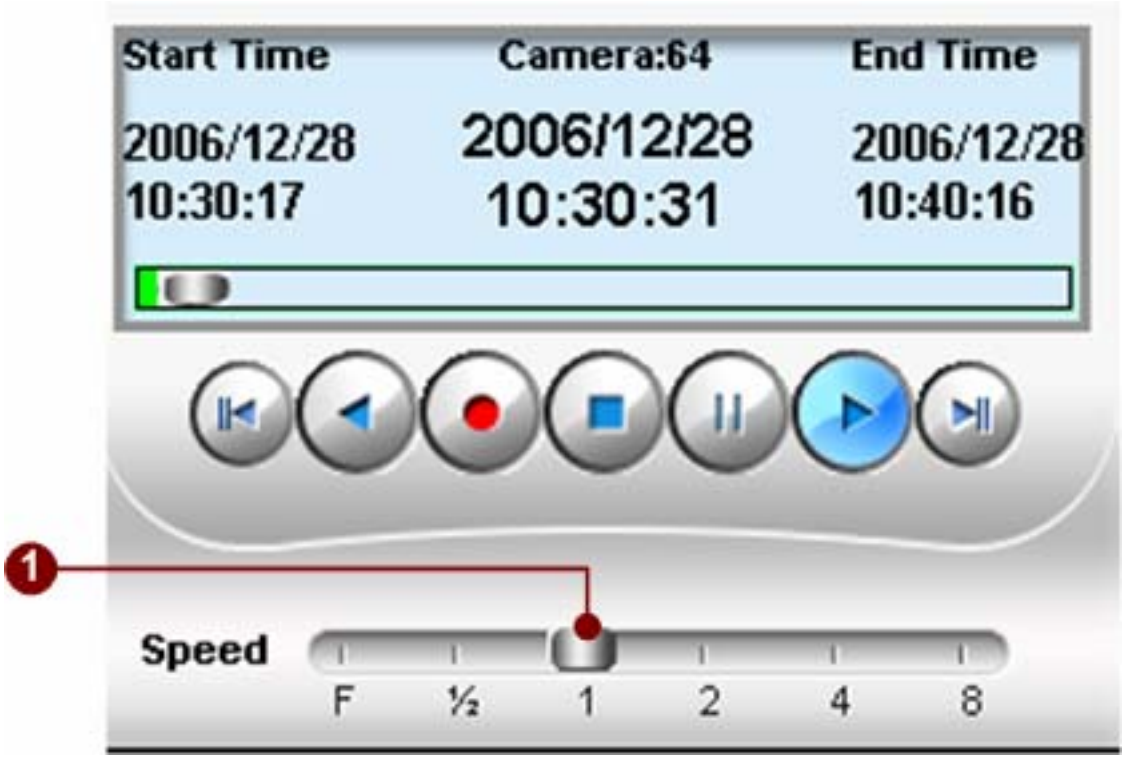


Figure 4-18 Speed Setting

F Speed : Frame By Frame to playback.

1/2 Speed: After selecting the speed types to “F”, the Pause Button will be enable.

1 Speed: Click Play button to Frame By Frame playback.

2 Speed: After selecting the speed type to “2”, the recording will be played with 2-time speed.

4 Speed: After selecting the speed type to “4”, the recording will be played with 4-time speed.

8 Speed: After selecting the speed type to “8”, the recording will be played with 8-time speed.

NOTE: When user wants to change play speed, please click on the numbers; do not drag the button on the bar.

Frame-by-frame Play

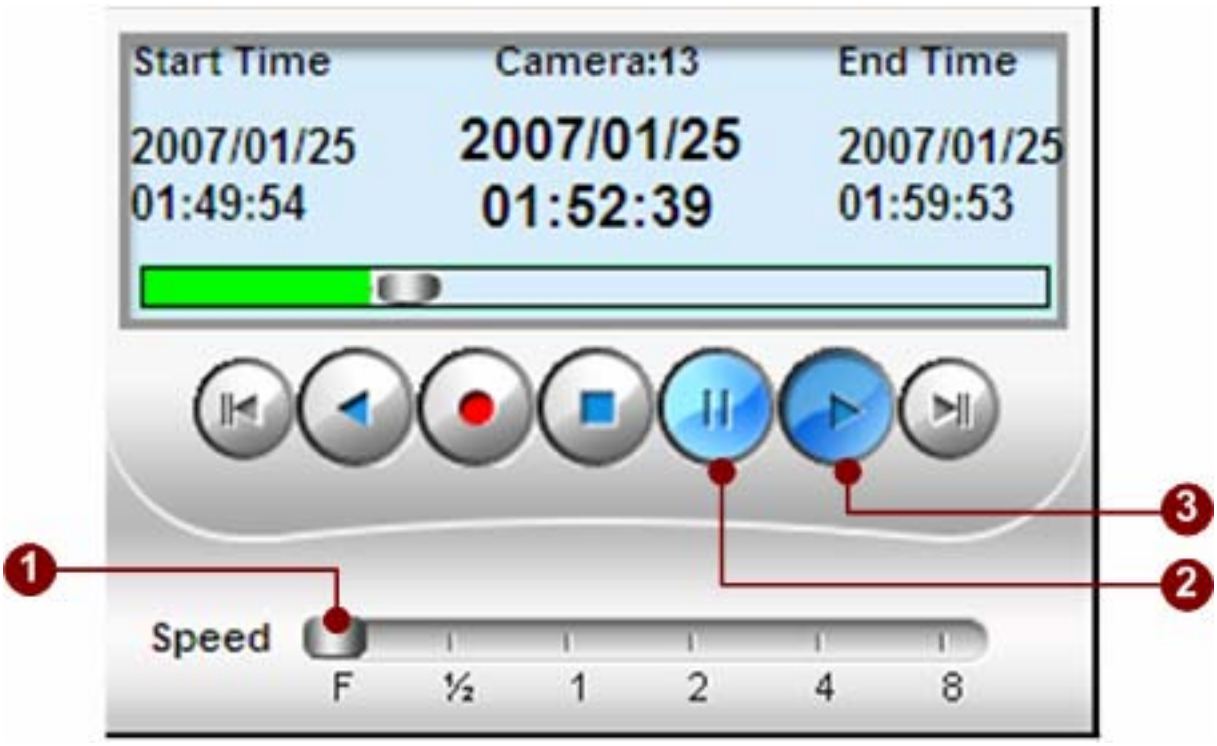


Figure 4-19 Frame By Frame Play

1. **Speed Setting**: Click the speed button to “F”.
2. **Pause Button**: After selecting the speed types to “F”, the Pause Button will be enabled.
3. **Play Button**: Click the Play button to Frame By Frame playback.

Jump to a new location in the file

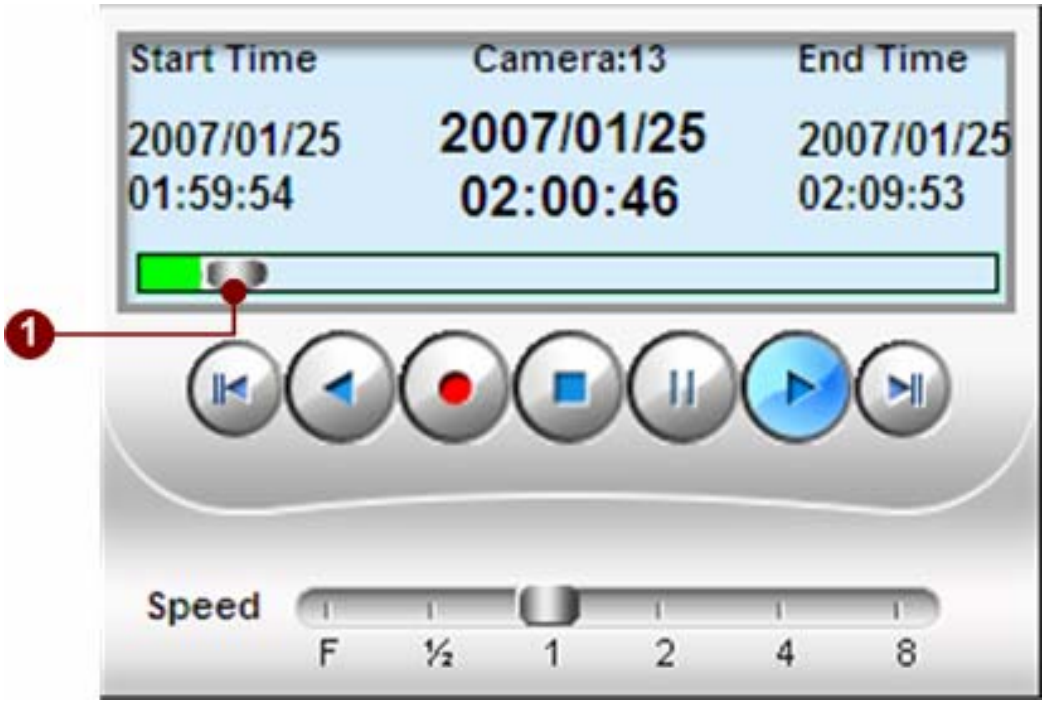


Figure 4-20 Playback Time Bar

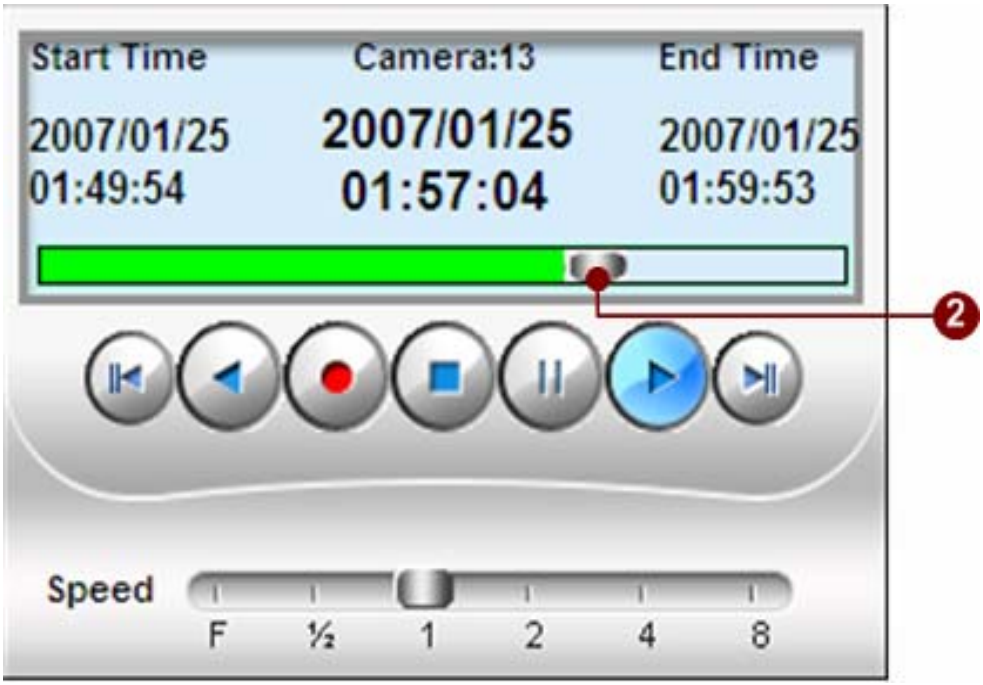


Figure 4-21 Click Time Bar to Playback

Playback maybe skipped to a certain point by dragging this bar forward and backward.

Jump to Next / Previous Recorded Archive

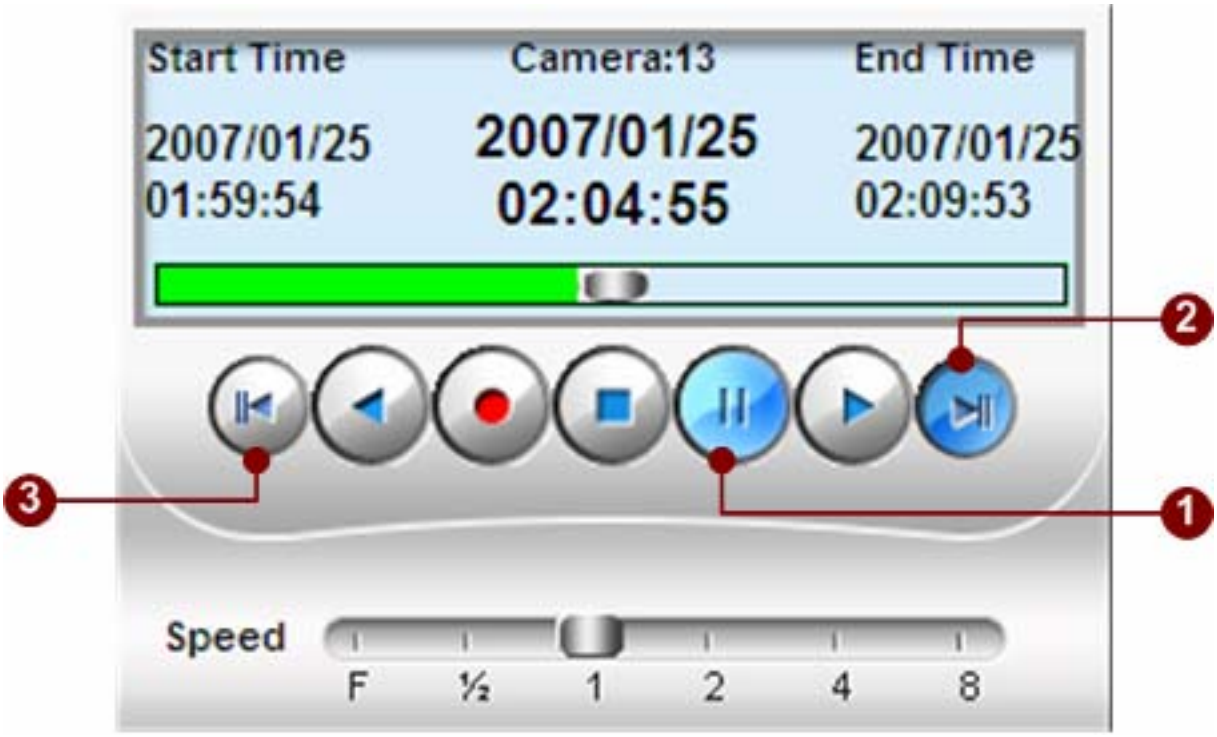


Figure 4-22 Jump to Next or Previous Recorded File

User can play the previous or next recorded file by clicking **Move to the next recording** and **Move to the previous recording** buttons.

Record part of the Archive to a new Archive

Figure 4-23 Record Part of the Archive to a new Archive

This record button enables the user to select which section user wants. To do so, click the Pause button and then click Record button. The previous recording will be neglected, then a new recording will be created at this moment; click this record button again to close this new recording. The new recording will be stored in the same folder as the original file.

Open Video Archive File

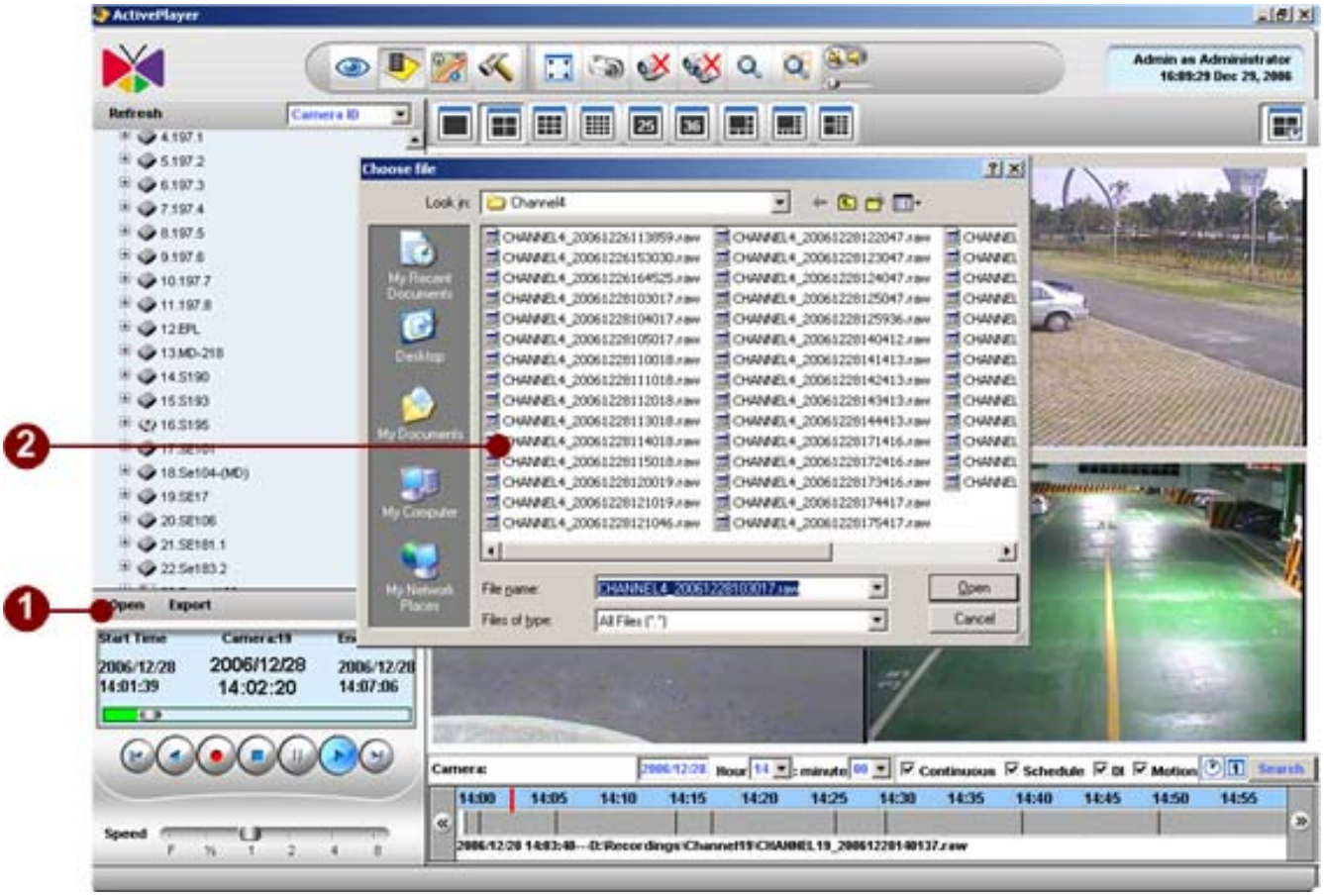


Figure 4-24 Open playback file

1. **Open file button**: Opens a particular RAW and AVI file manually.
2. **Open file dialog**: This standard open file dialogue box appears when the “Open” button is pressed. User may browse for the file user would like to play normally.

Export Video Archive

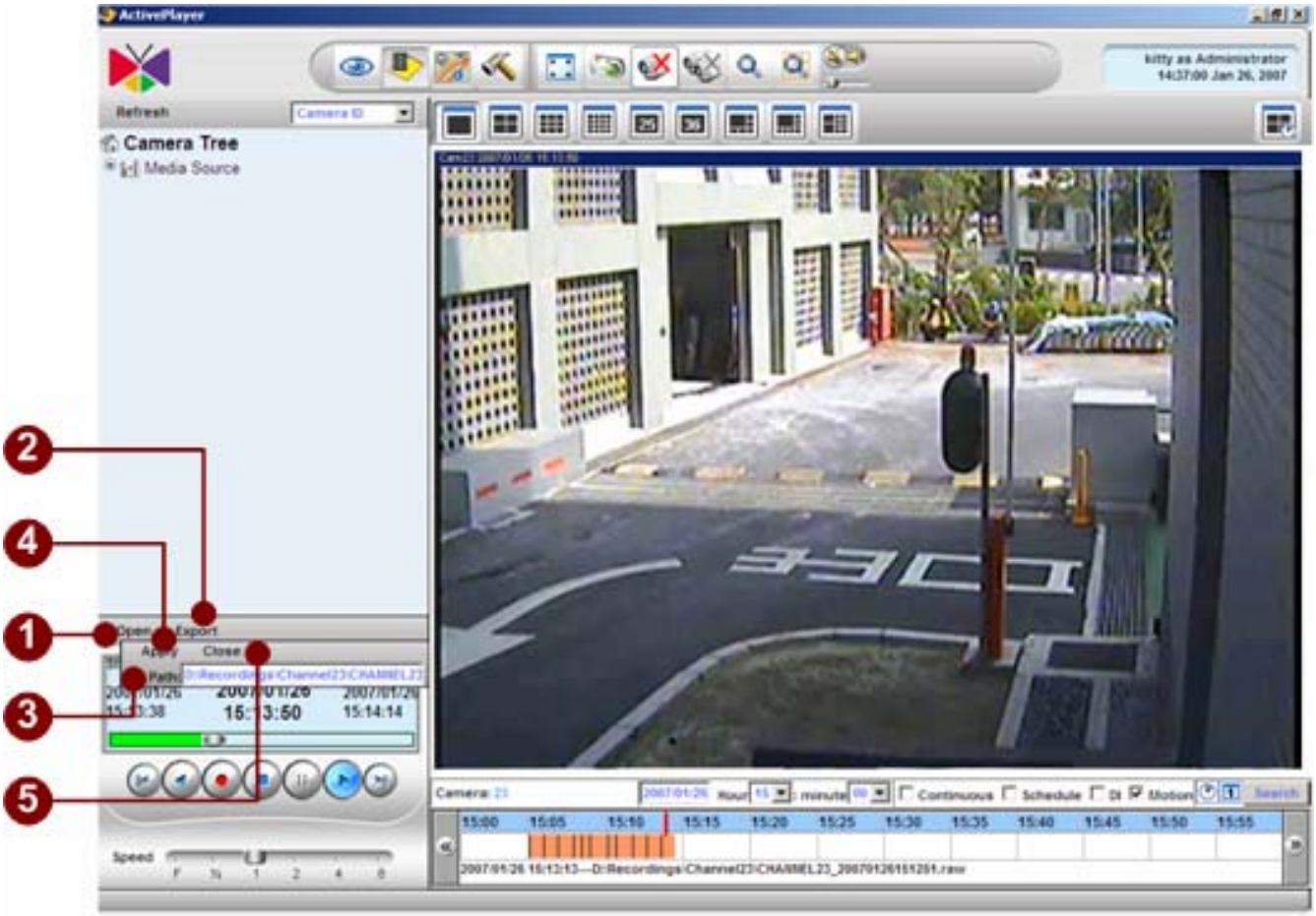


Figure 4-25 Export to avi file

1. **Open A Playback File**: Open file to be exported.
2. **Export Button**: Click the Export button.
3. **Export file path**: Change where the AVI file is to be exported if necessary.
4. **Apply**: Start exporting.
5. **Close**: Close export.

NOTE: User must have the FFDShow or DivX codec installed in your computer to play the converted video in Windows Media Player. FFDShow can be found on Internet or ACTi web site.

Time-based Search Bar

Search Archive

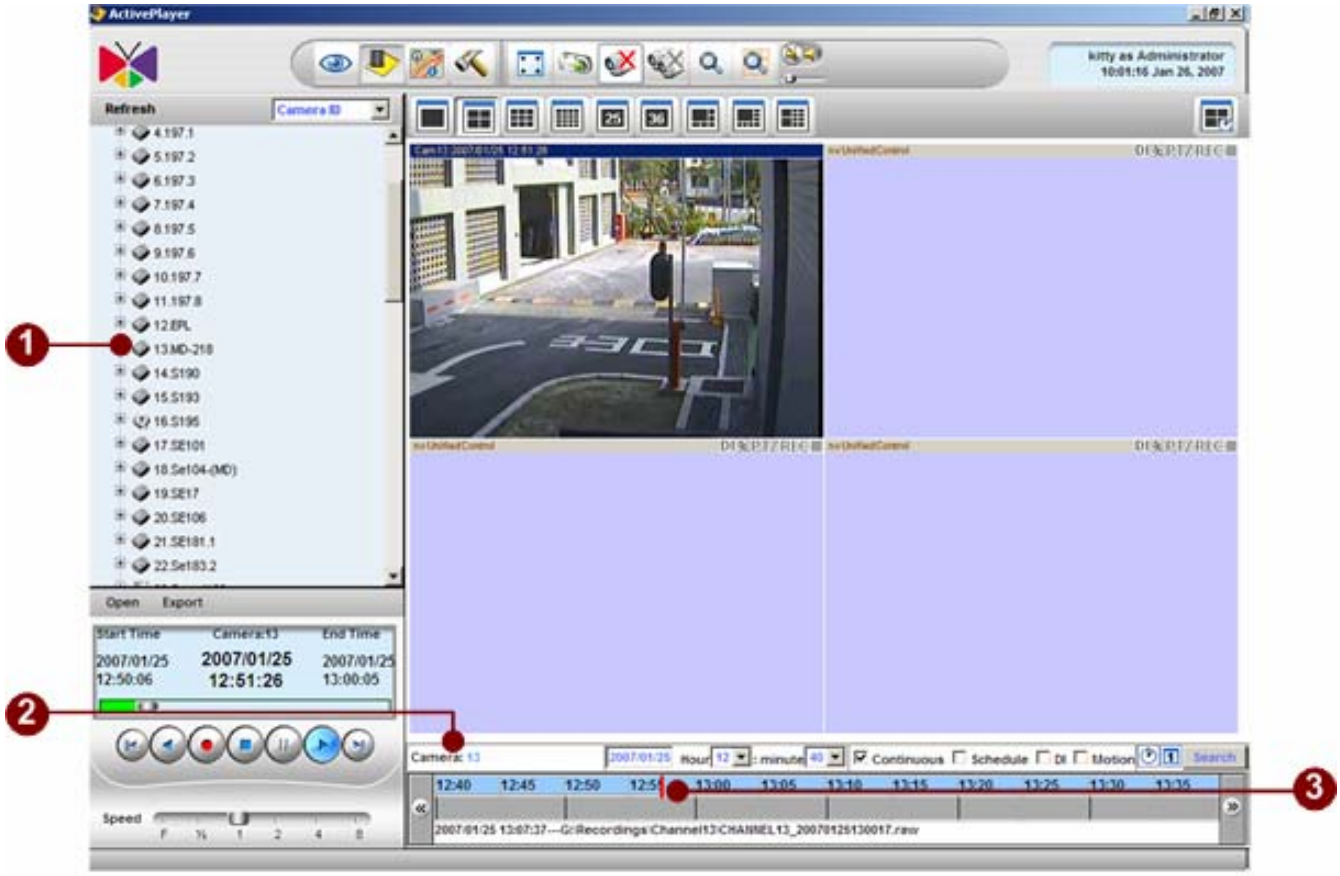


Figure 4-26 Select Channel

1. **Camera nodes**: Choose the camera node that user wants to playback.
2. **Selected camera**: This shows the camera node.
3. **Time bar**: This red bar shows time that this video clip is play.

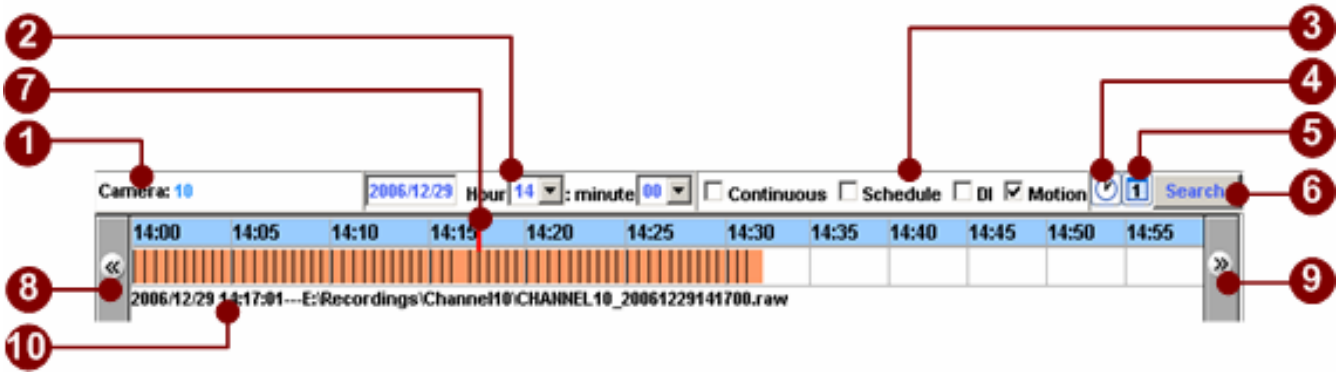


Figure 4-27 Time-based search bar

1. **Camera ID**: Shows the camera currently being displayed. To select the camera, click the camera name on the device tree.
2. **Search time**: Search and select where user wants your video to be played in the entire video. This time is relative to the device clock instead of the computer clock.
3. **Search event**: Search for different types of event recorded in that period of time.
4. **View-by-hour button**: Change the scale of the time bar to one hour.
5. **View-by-day button**: Change the scale of the time bar to 24 hours.
6. **Search button**: Search for the events in the entire video.
7. **Time bar**: Show where the video is being played in time table.
8. **Show previous section**: Go to the previous section.
9. **Show next section**: Go to the next section.
10. **File Information**: Shows the recorded path and date/time of the recording file.

Search Criteria (Channel, Date, Time, Event)

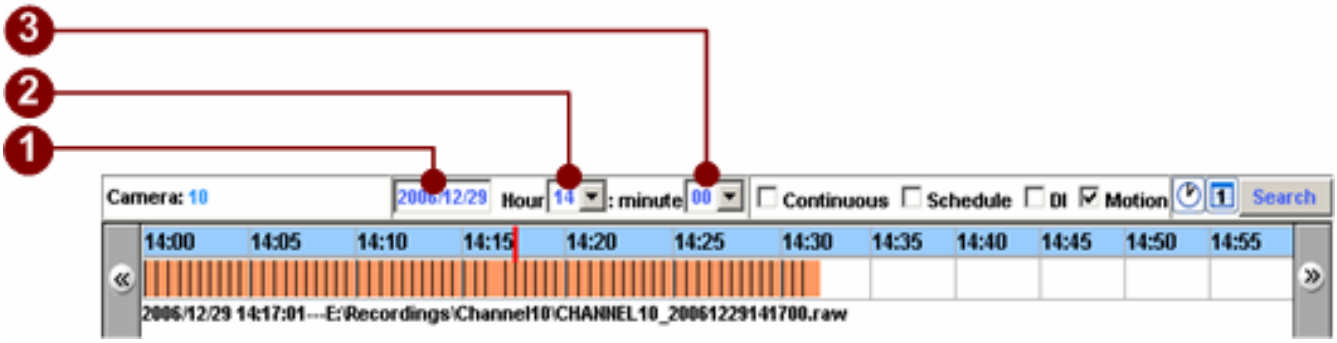


Figure 4-28 Search criteria

1. **Select by date to Search**: Show what date the video starts. User can key in a specific date and the video of date will be displayed.
2. **Select by Hour to Search** : Show what hour the video starts. User can key in a specific hour, and the video of that hour will be displayed.
3. **Select by Minute to Search**: Show what minute the video starts. User can key in a specific minute, and the video of that minute will be displayed.

NOTE: This time is relative to the device clock instead of the computer clock.

View by Hour

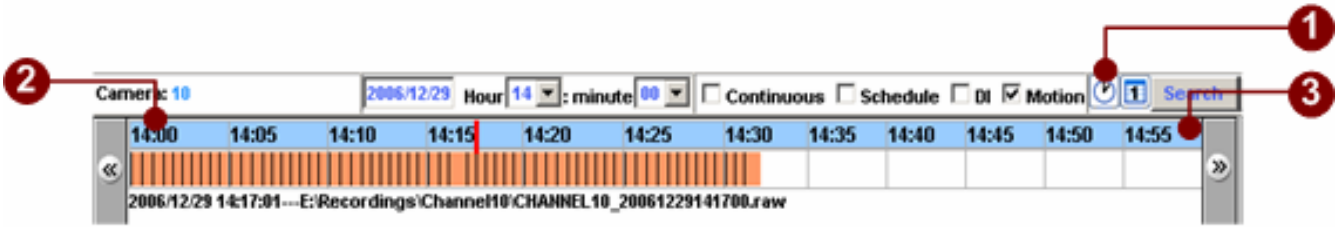


Figure 4-29 View by hour

1. **View-by-hour button**: Click this button to change to view by hour.
2. **Start time**: This shows when this recording starts.
3. **End time**: This shows when this recording ends.

View by Day

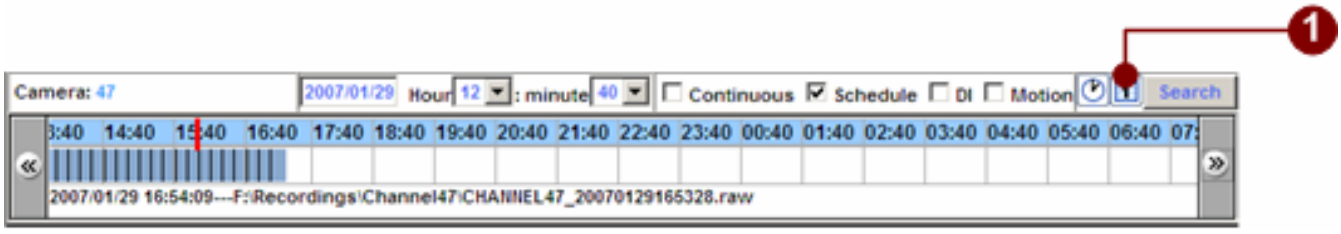


Figure 4-30 View by day

1. **View-by-day button**: After clicking this button, user will see a day which is divided into 23 sections by hour.

Continuous Recording

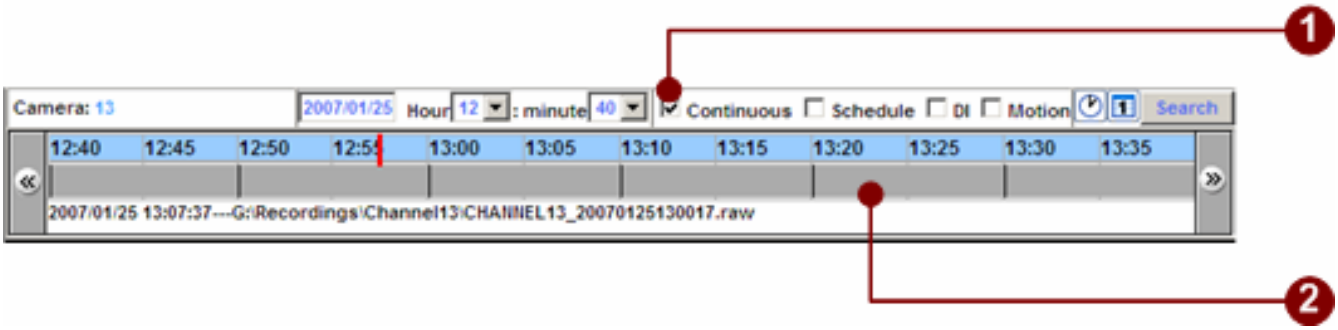


Figure 4-31 Continuous Recording

1. **Continuous Recording Selection**: Check to select continuous recording search criteria
2. **Continuous recording**: After enabling this checkbox, the time bar will only show continuous recording. User can see the entire time bar become gray.

Schedule Recording

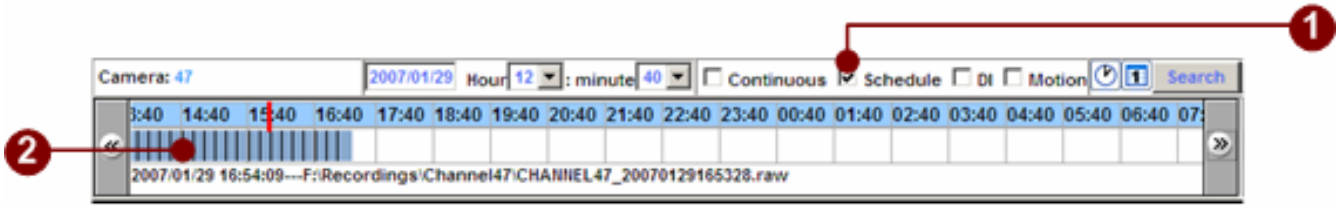


Figure 4-32 Schedule Recording

1. **Schedule Recording Selection**: Click to set Schedule Recording criteria
2. **Schedule recording**: After enabling this checkbox, the time bar will only show scheduled recording. User can see the entire time bar become blue

Event Recording

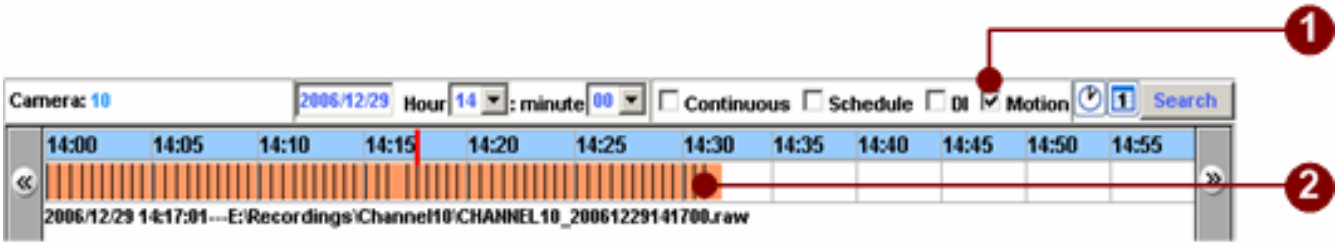


Figure 4-33 Event Recording

1. **Event Recording Selection**: Event recording criteria including DI (alarm) or Motion event
2. **Event recording**: After enabling this checkbox, the time bar will only show event recording. User can see the entire time bar become orange

Navigate Time-based Search Bar

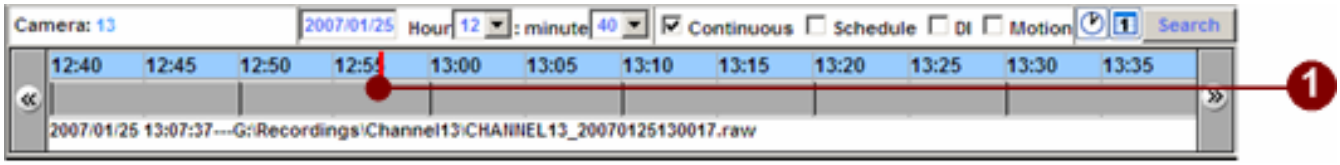


Figure 4-34 Navigate Time-Based Search Bar

User can choose which section he wants to play by clicking on the time bar.

Scroll Previous Button

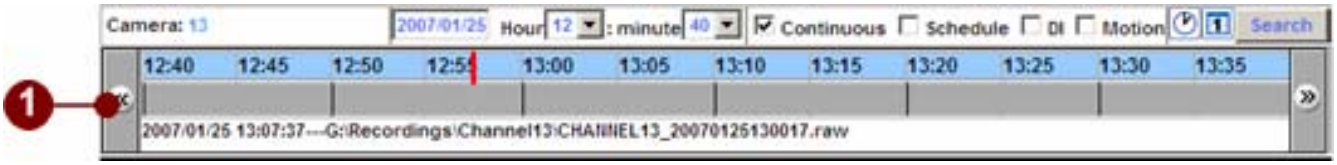


Figure 4-35 Scroll Previous Button

1. **Scroll Previous button**: user can move to previous section in this recording by clicking this button.

TIP: Under hour mode, clicking on this button will scroll back to previous hour; under day mode, click on this button will scroll forward to previous day.

Scroll Next Button

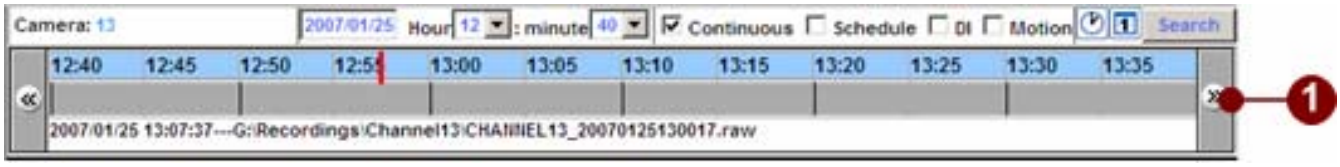


Figure 4-36 Scroll Next Button

1. **Scroll Next button**: User can move to the next section in the recording by clicking this button.

TIP: Under hour mode, clicking on this button will scroll back to next hour; under day mode, click on this button will scroll forward to next day.

Channel Layout Manager

Window Layout Selection

Figure 4-37 Layout bar

1. **1-Window View**: Shows a single channel; video is not expanded if maximum resolution of the source video is reached.
2. **4-Window View**: Shows a maximum of 2x2 video channels at once.
3. **9-Window View**: Shows a maximum of 3x3 video channels at once.
4. **16-Window View**: Shows a maximum of 4x4 video channels at once.
5. **25-Window View**: Shows a maximum of 5x5 video channels at once.
6. **36-Window View**: Shows a maximum of 6x6 video channels at once.
7. **6-Window View**: Shows one video channel with a larger view, and 5 others at a lower resolution.
8. **8-Window View**: Shows one video channel with a larger view, and 7 others at a lower resolution.
9. **10-Window View**: Shows two video channels with a larger view, and 8 others at a lower resolution.
10. **Synchronous Button**: 4-channel synchronized playback

TIP: The Synchronous Button will be enabled when there are playback files in the ActivePlayer system.

Change Window Layout

Figure 4-38 4-Channels Window Layout Playback

Figure 4-39 6-Channels Window Layout Playback

Single Channel Video Clip Playback of Different Time Frame

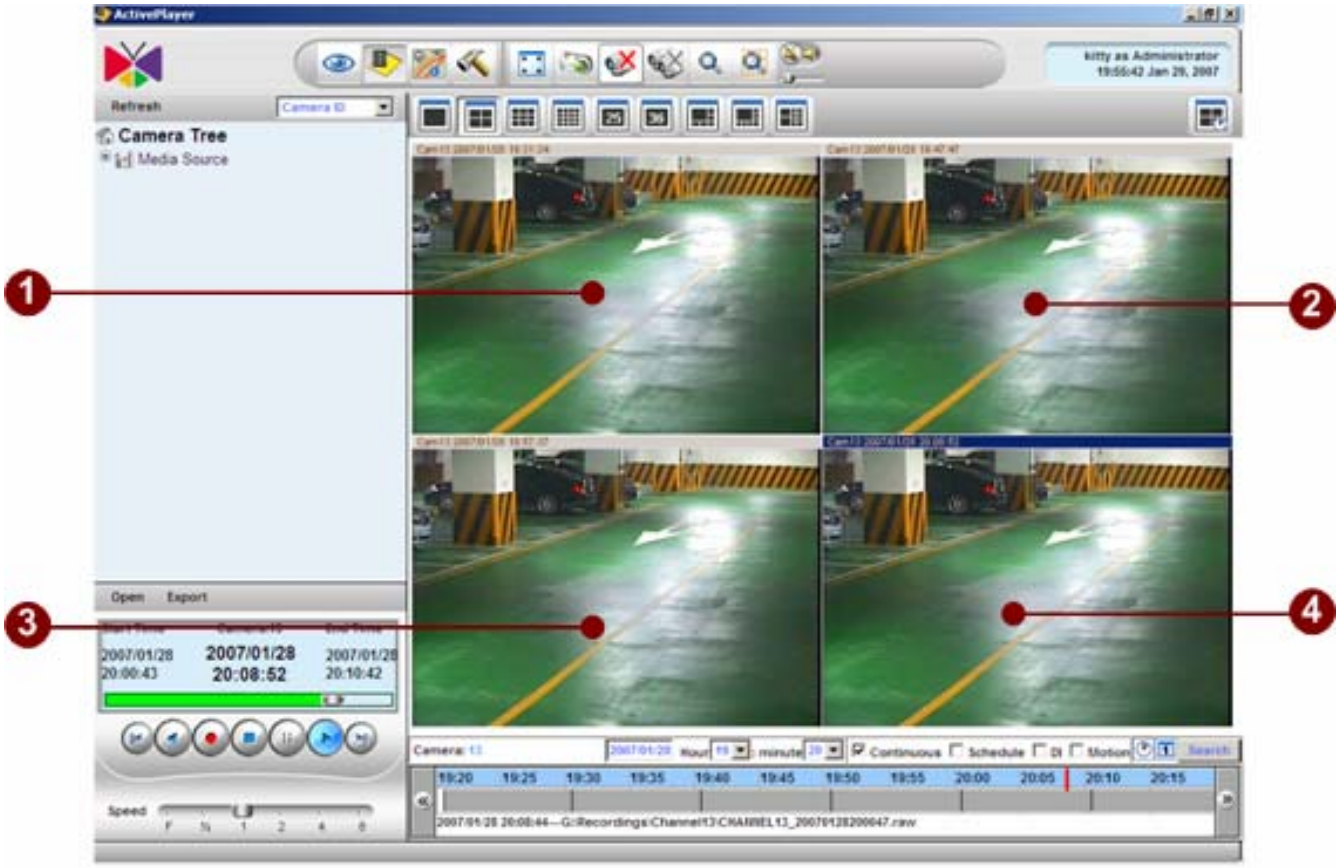


Figure 4-40 Different Time To Playback

This function allows user to play 4 different sections in one recording. User may find 4 different window and click on 4 different time in the time-based search bar, this may displays the same channel with 4 different date / time in different video window separately.

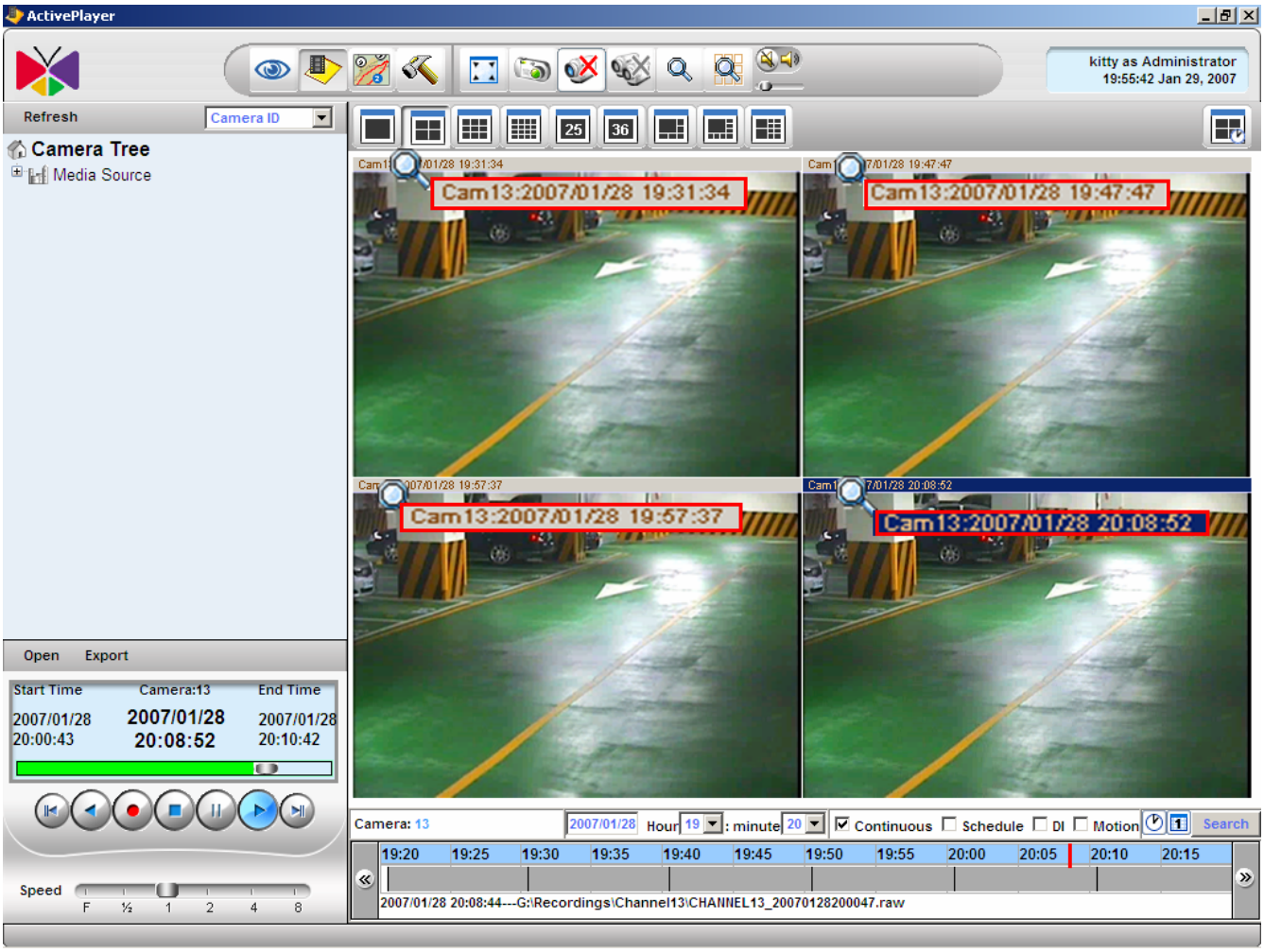


Figure 4-41 Check the Date/Time

According to Figure 4-42, there are 4 different windows showing 4 different sections of one video recording.

Window 1 displays **CAM13:2007/01/28 19:31:34**

Window 2 displays **CAM13:2007/01/28 19:47:47**

Window 3 displays **CAM13:2007/01/28 19:57:37**

Window 4 displays **CAM13:2007/01/28 20:08:52**

Synchronous Playback

This synchronous playback function allows user to play different recordings at the same time.

Drag 4 channels first, then Synchronize them with Baseline Time Frame

1. Select Channel on Active Window

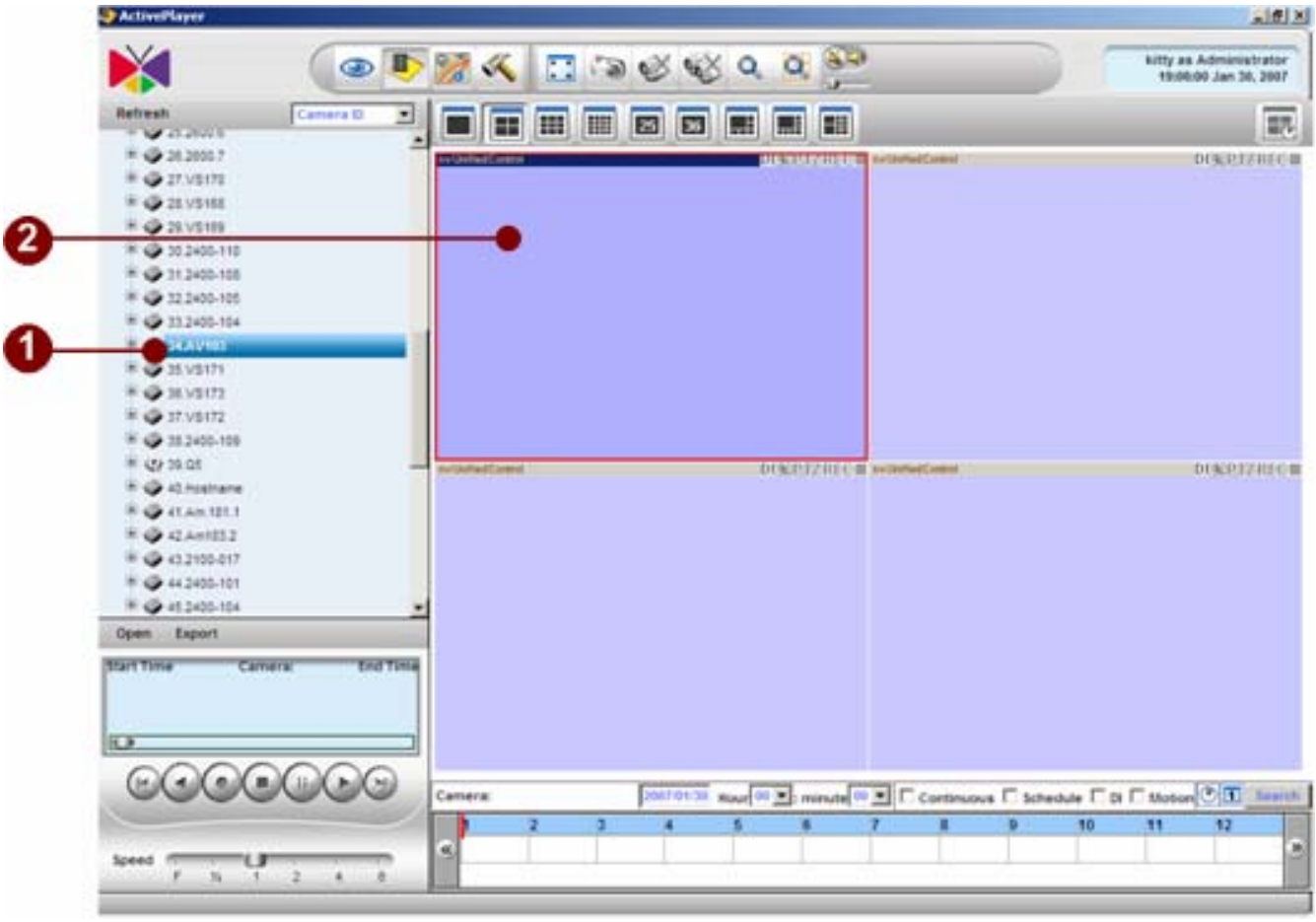


Figure 4-42 Choose 4-channel playback file

1. **Choose Camera ID**: Choose four channels camera ID that user wants to playback, user can Drag and Drop the camera to video screen.
2. **Choose Video Screen**: Drop the camera ID to Select video screen. After choose 4-channels, the video screen still is blue.

2. Search recording

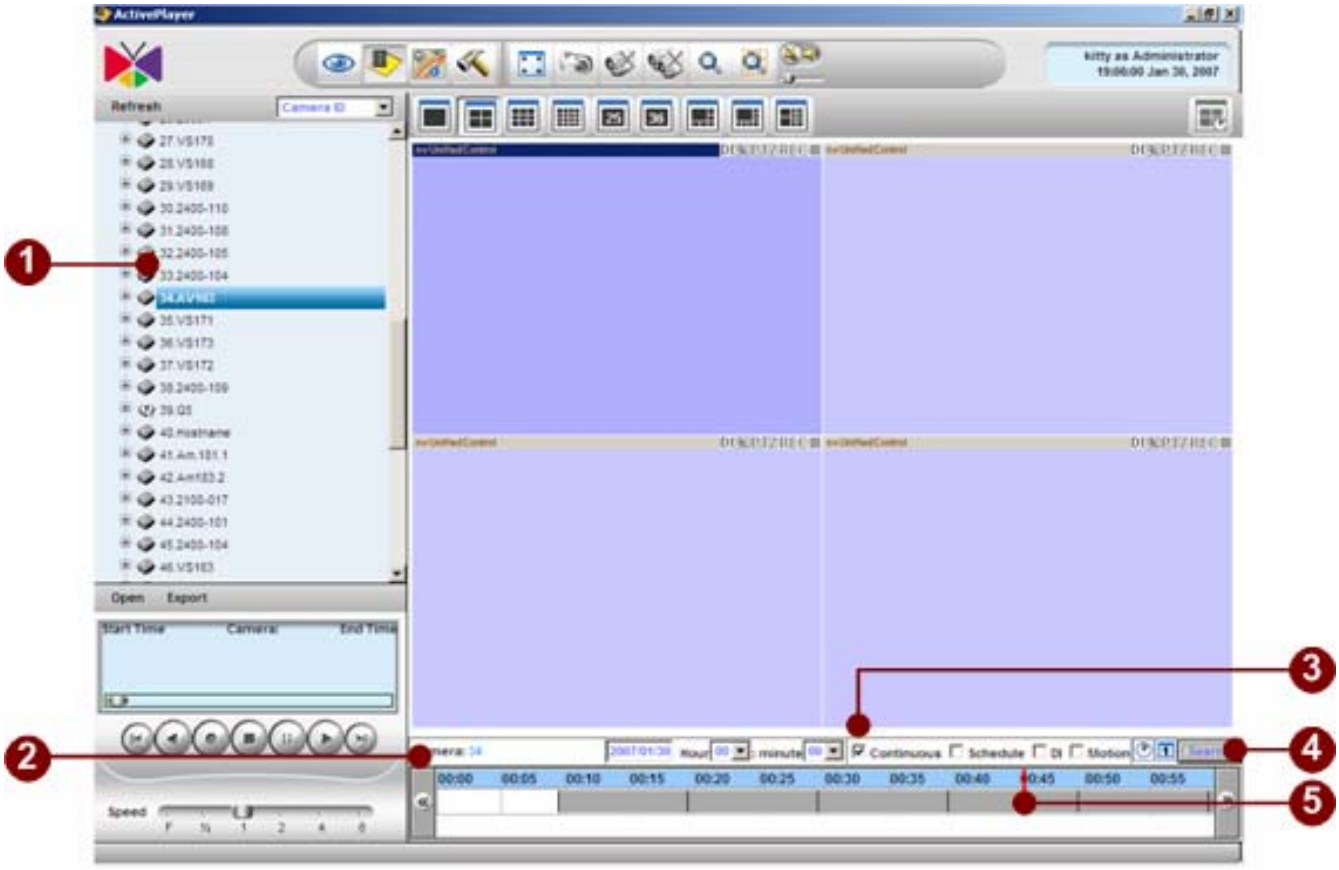


Figure 4-43 Search the Active window playback

1. **Choose the active camera**: Click the active camera, then user can see the camera name on the Time bar.
2. **Camera Name**: Show the selected camera.
3. **Search By Date/Time and Recording Type**: select the rules that user wants to playback.
4. **Search Button**: Search for events.
5. **Playback Time Bar**: Choose the time that user wants to playback, then Click the time bar to start playback.

3. Select different recording for different windows

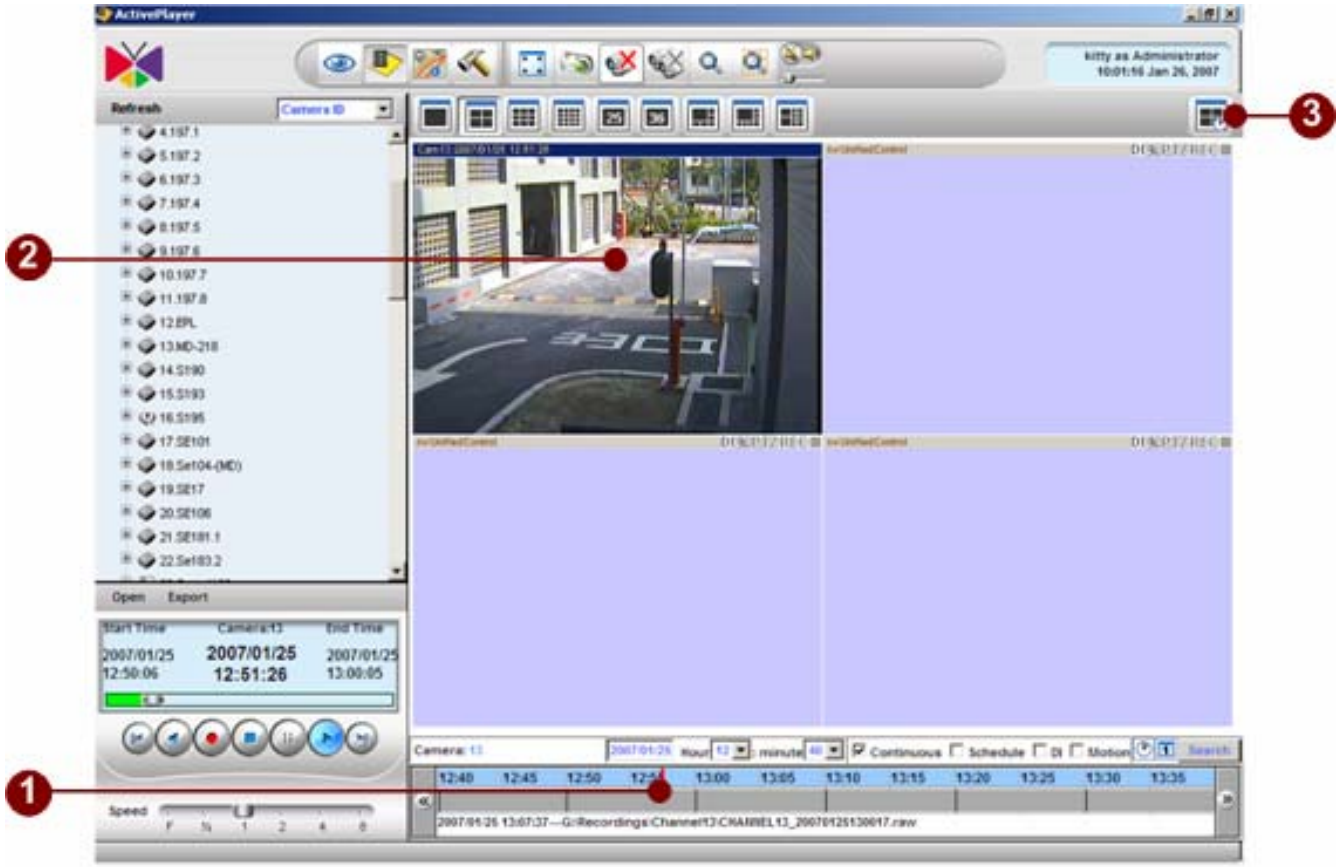


Figure 4-44 Synchronous Playback

1. **Choose the active camera**: Click the active camera, then user can see the camera name on the Time bar.
2. **Camera Name**: Show the selected camera..
3. **Search By Date/Time and Recording Type**: select the rules that user wants to playback.

4. Show different windows' information

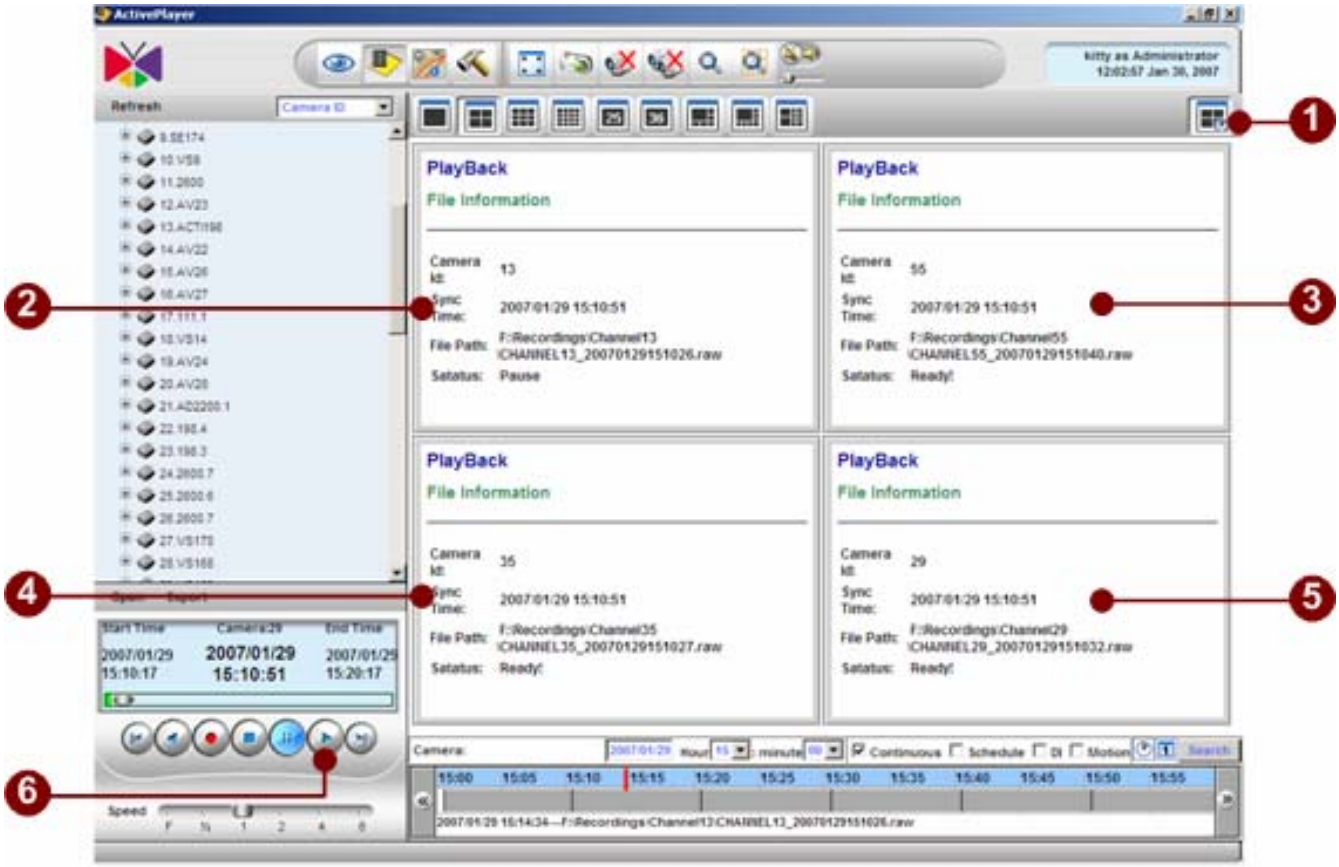


Figure 4-45 Synchronous Playback Time

1. **Synchronous Button**: Click this button, user can see that the file status is pause on the active channel . And others are Ready.
2. **Active Window**: User can see the file synchronous Time in active window and the file status is pause.
3. **Second camera window**: User can see the file synchronous Time in second window and the file status is Ready.
4. **Third camera window**: User can see the file synchronous Time in third window and the file status is Ready.
5. **Fourth camera window**: User can see the file synchronous Time in fourth window and the file status is Ready.
6. **Play button**: After all channel file is Ready, user can click this button to start synchronous playback.

5. Synchronize different windows

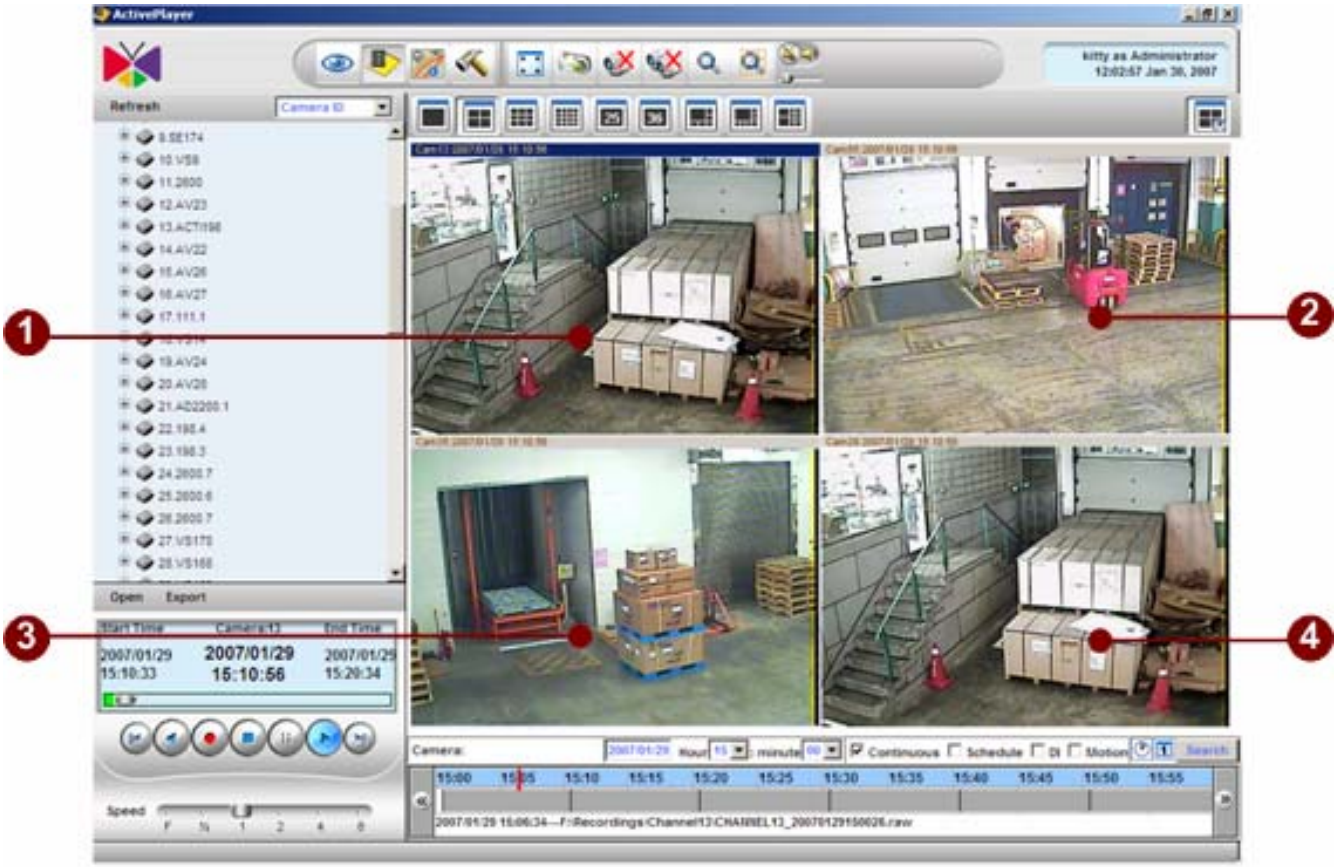


Figure 4-46 Synchronous Playback Mode 1

1. **Synchronous Button**: Click this button, user can see the file status is pause on the active channel . And others are Ready.
2. **Active Window**: User can see the file synchronous Time in active window and the file status is pause.
3. **Second camera window**: User can see the file synchronous Time in second window and the file status is Ready.
4. **Third camera window**: User can see the file synchronous Time in third window and the file status is Ready.

Playback 4 Different Archives, then Synchronize them to the same time frame

1. Select an active window

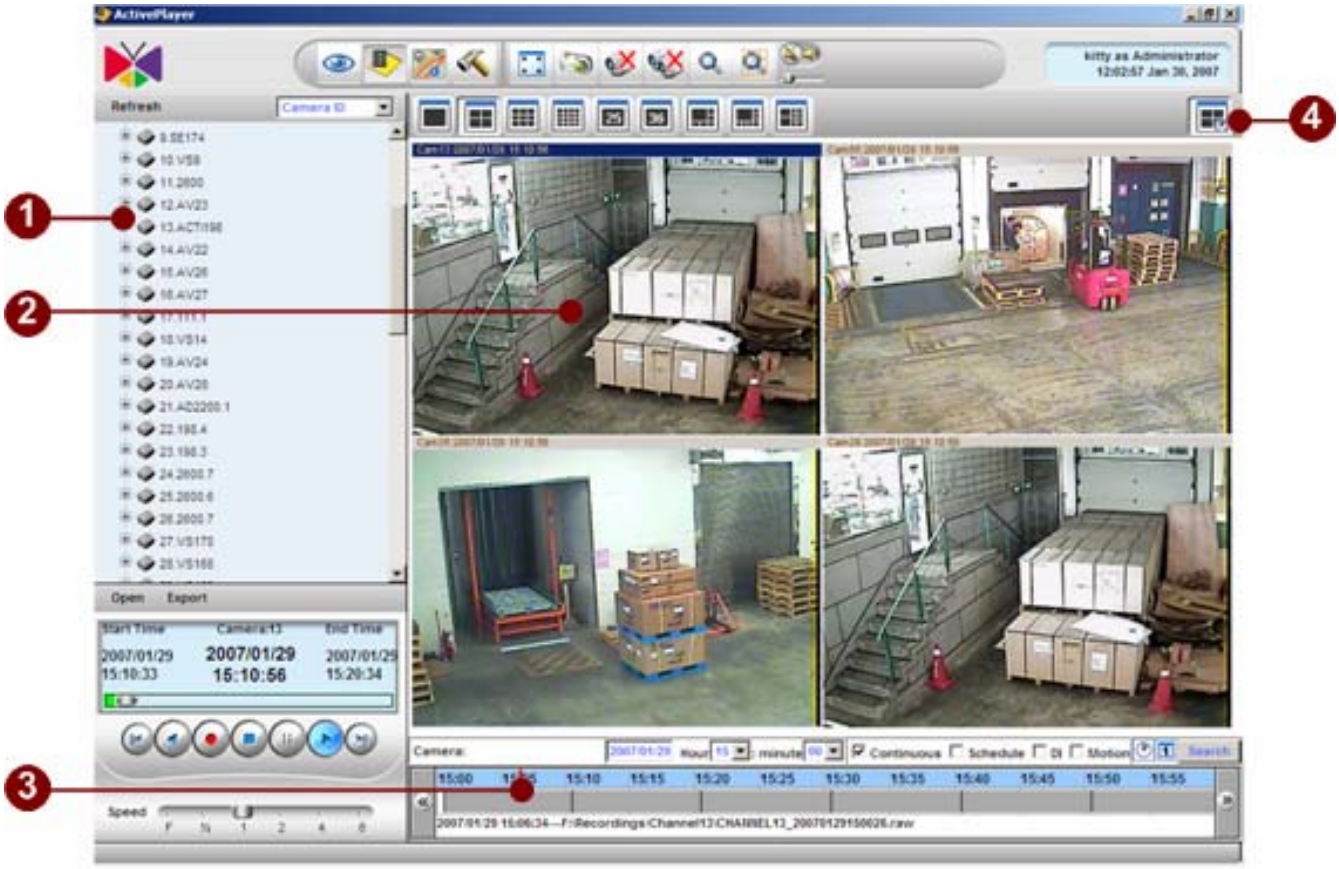


Figure 4-47 Choose 4-channel playback file and set active window

1. **Choose the Camera ID**: Click anyone video screen to set active window.
2. **Set Active Window**: Click anyone video screen to set active window.
3. **Time Bar**: Click this button to synchronize 4-channel playback.
4. **Synchronous button**: Click this button to synchronize 4-channels playback.

2. Show different windows' information

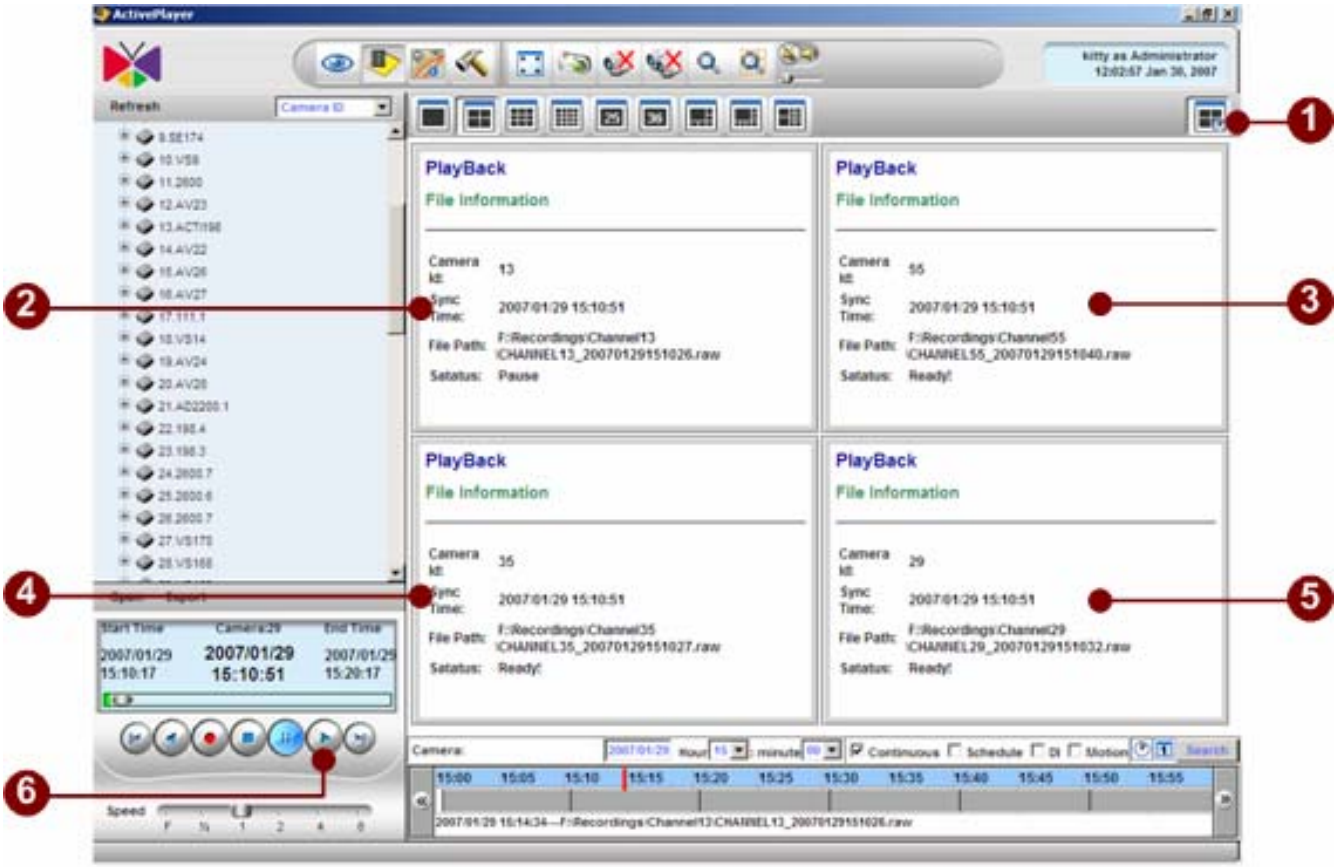


Figure 4-48 4-Channel Synchronous Playback Time

1. **Synchronous Button**: Click this button, user can see the file status is paused on the active channel .
2. **Active Window**: User can see the file synchronous Time in active window and the file status is pause.
3. **Second camera window**: User can see the file synchronous Time in second window and the file status is Ready.
4. **Third camera window**: User can see the file synchronous Time in third window and the file status is Ready.
5. **Forth camera window**: User can see the file synchronous Time in fourth window and the file status is Ready.
6. **Player button**: After all channel file status is Ready, user can click this button to start synchronous playback.

3. Synchronize different windows

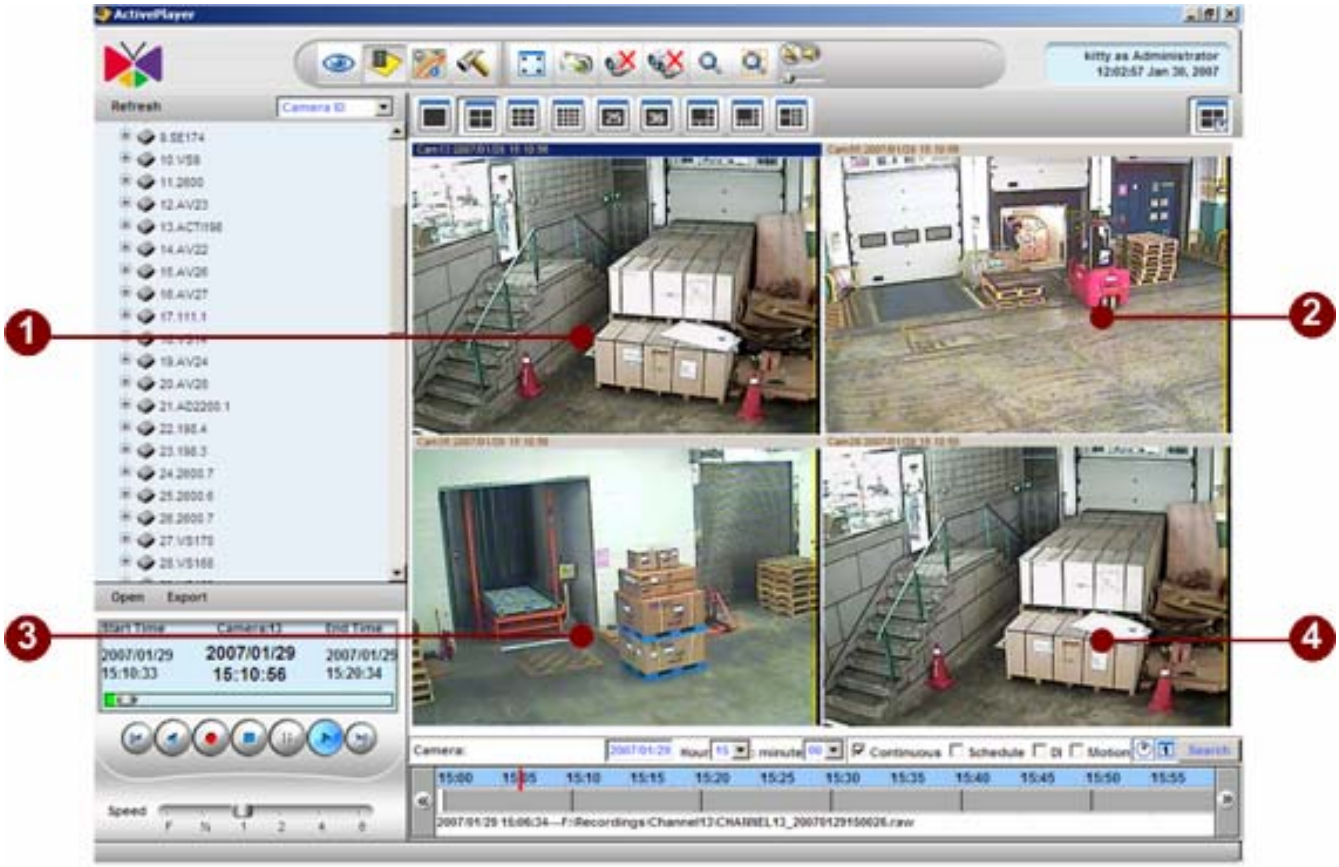


Figure 4-49 4-channel Synchronous Playback Mode 2

User can play four different recordings through 4 different windows.

Playback Archive First, then Search for other Channels at the same time frame

1. Select an active window

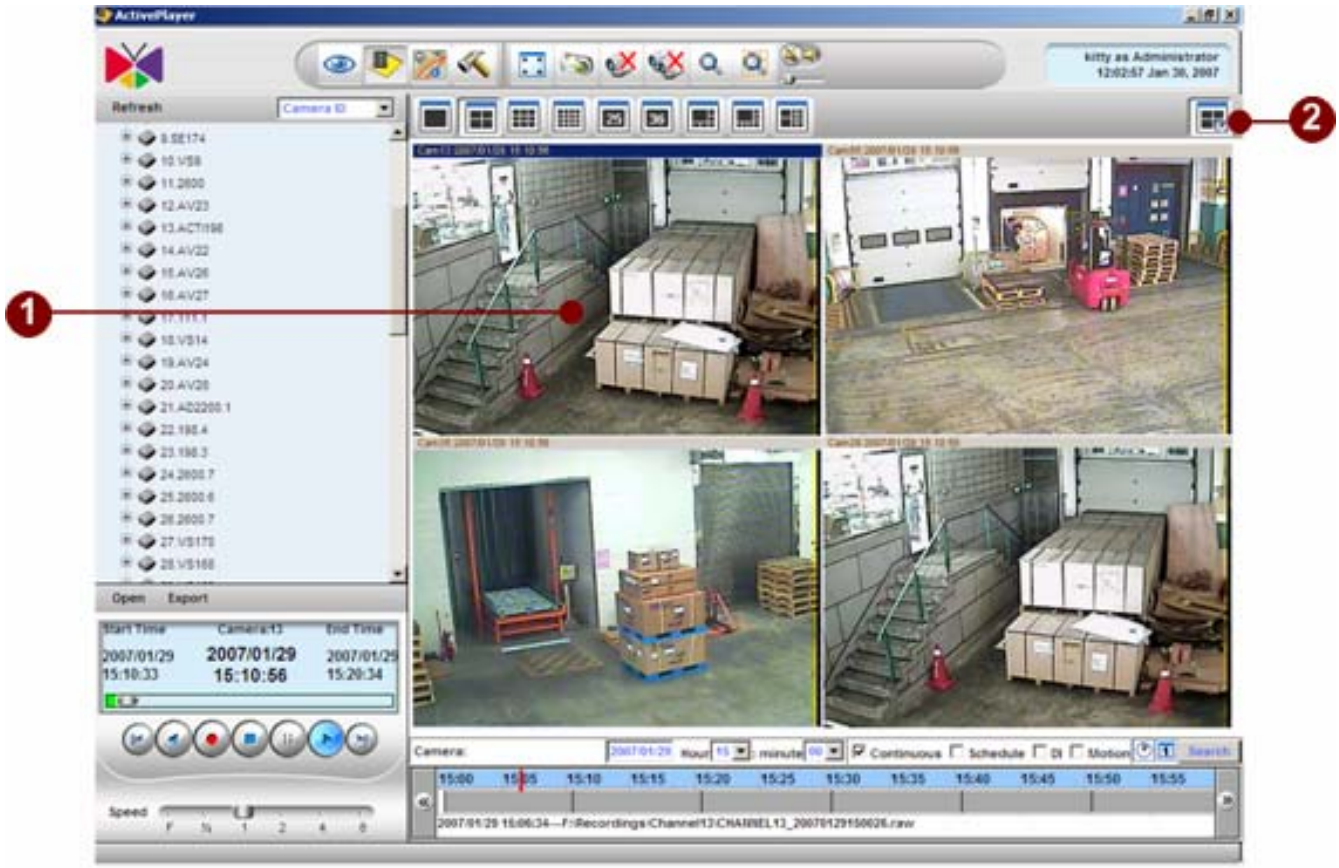


Figure 4-50 4-channel playback file and set active window

1. **Set Active Window**: Click anyone video screen to set active window.
2. **Synchronous button**: Click this button to synchronize 4-channel playback.

2. Show different windows' information

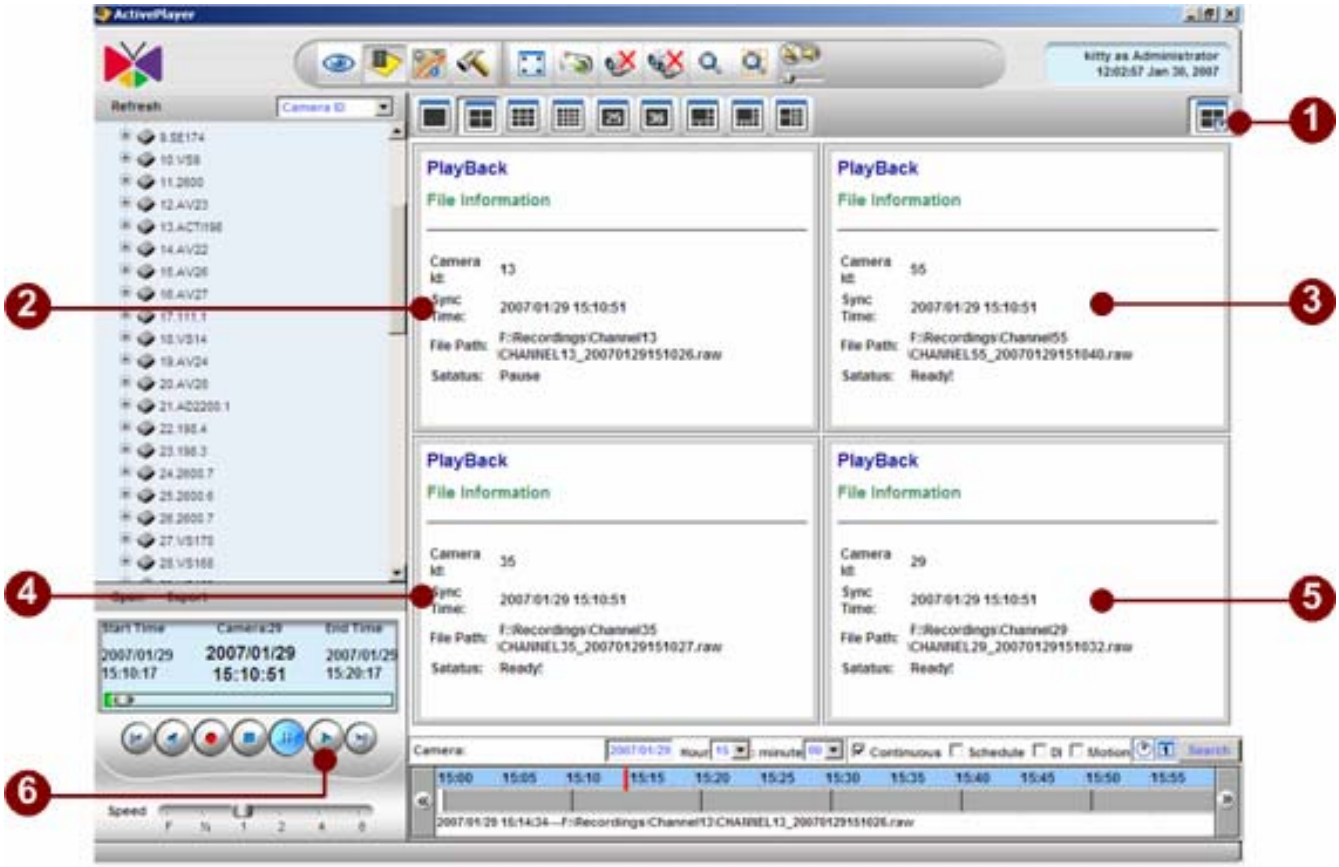


Figure 4-51 4-Channel Synchronous Playback Time

1. **Synchronous Button**: Click this button, user can see the file status is pause on the active channel.
2. **Active Window**: User can see the file synchronous Time in active window and the file status is pause.
3. **Second camera window**: User can see the file synchronous Time in second window and the file status is Ready.
4. **Third camera window**: User can see the file synchronous Time in third window and the file status is Ready.
5. **Fourth camera window**: User can see the file synchronous Time in fourth window and the file status is Ready.
6. **Play button**: After all channel file status is Ready, user can click this button to start synchronous playback.

3. Synchronize different windows

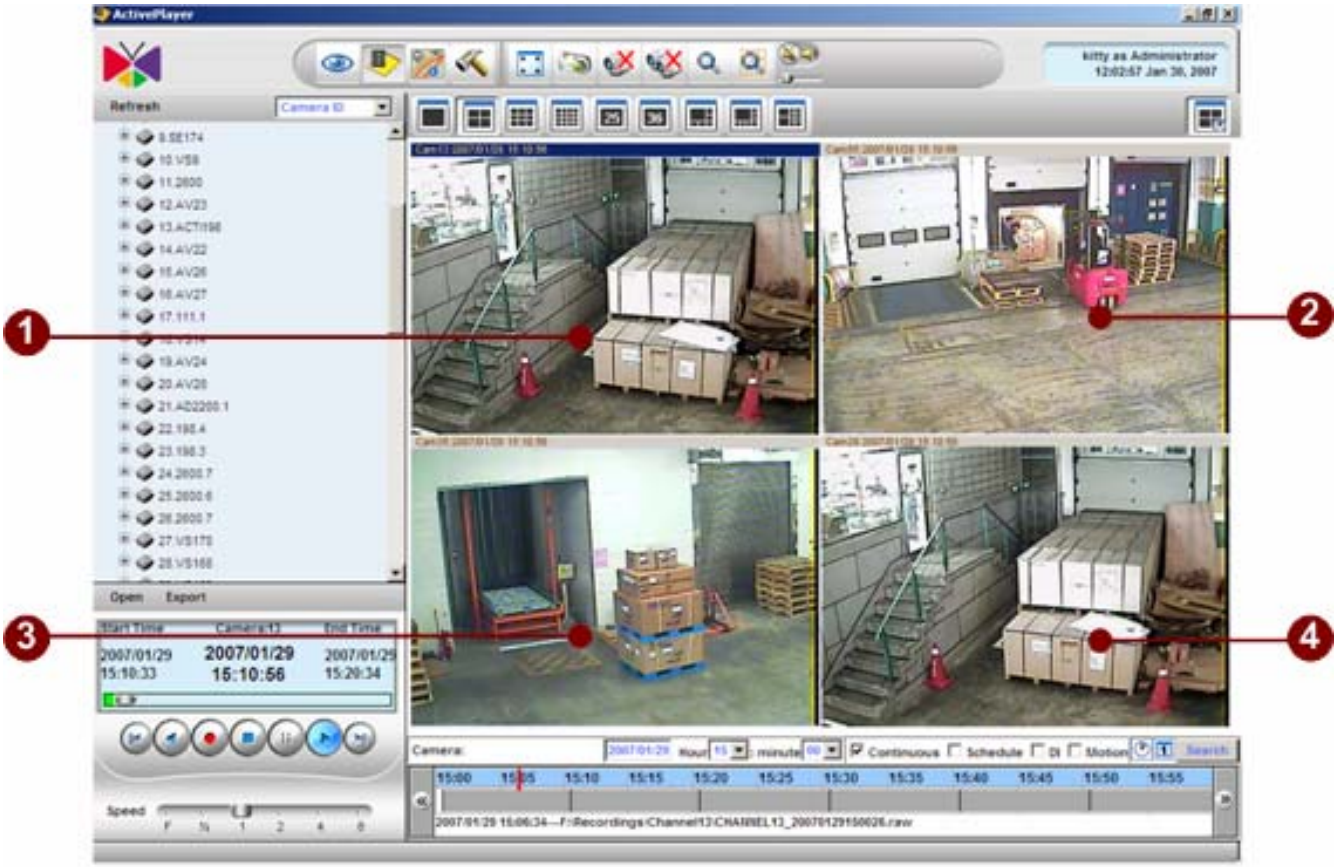


Figure 4-52 4-channel Synchronous Playback Mode 3

5. Active Map

Introduction

Description: eMAP viewer is an interface for user to see images in a eMAP. It can help customer to have more visualized control on surveillance system. This Chapter aims to guide userthrough the eMAP operation

eMAP Viewer contains functions of 1. eMAP live preview, 2. eMAP tree directory.

Relations with other chaptor: The eMAP viewer operation relies on correct setup during "Quick-installation-Guide: Software installation" and "Chapter 7: ActiveSetup".

The eMap Viewer (ActiveMap) is the application designed to perform live preview for installed ACTi devices on a variety of imported maps or floor plans. It allows for a number of different maps, with different camera previews on each map, as well as touring between layouts. This section explains the interface in detail, as well as gives instructions for using these advanced functions.

Overview

Below are the main page of eMAP viewer. It contains several sections as below.

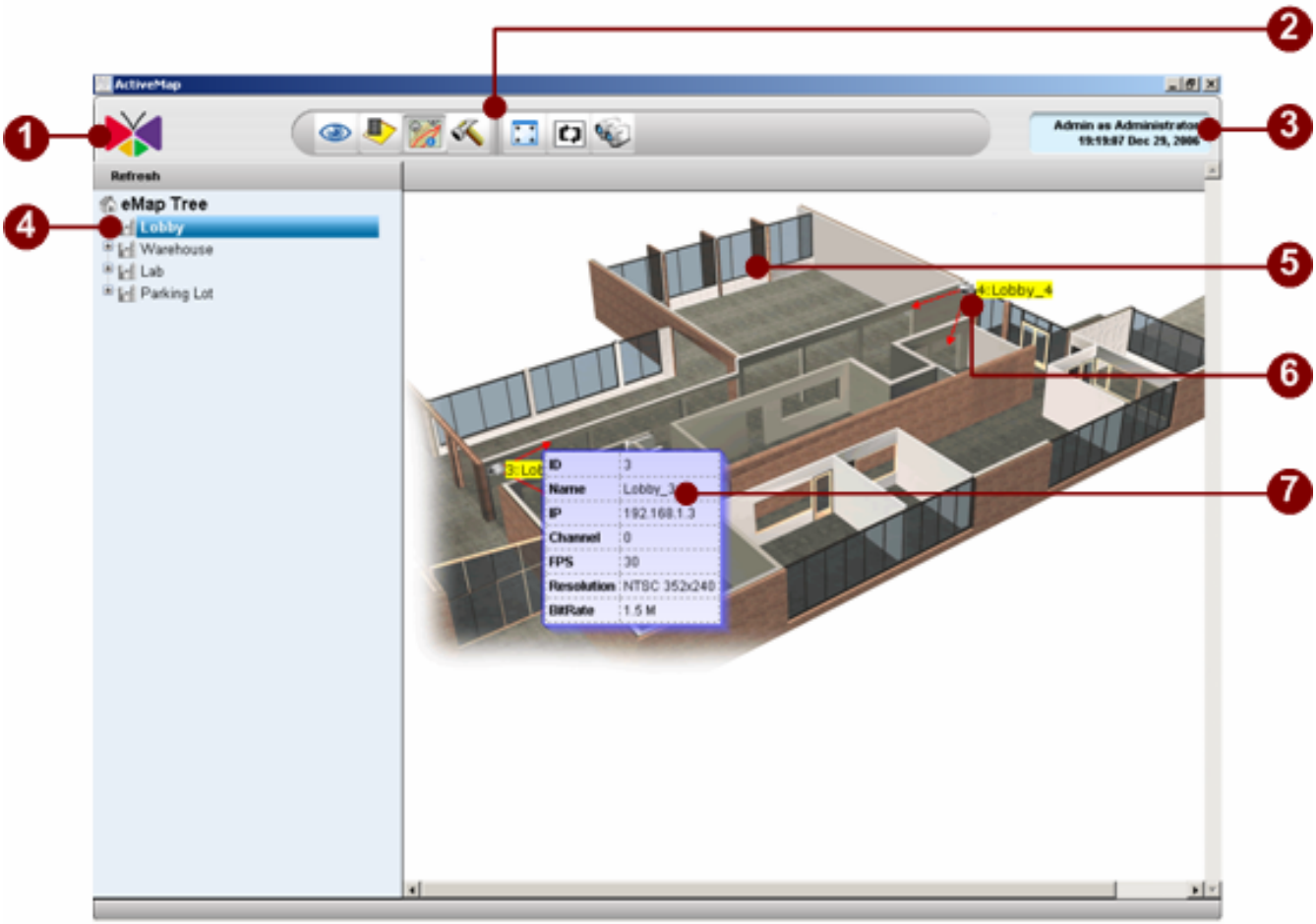


Figure 5-1 eMap Page

1. **About Us**: Click this button to open the ActiveMonitor in another browser window.
2. **Active eMap Toolbar**: Click to open various NVR 2.0 applications.
3. **User Information**: Click to show user information and password change.
4. **eMap Camera Tree**: Click this button to stretch the eMAP viewer to full screen.
5. **eMap** : Click this button to enable/disable the auto patrol function of eMAP viewer. When auto patrol function is enabled, the eMAP viewer will switch between your selected maps with programmable dwell time later section for more details.
6. **Camera Icon**: Click this button to open/close all mini-preview map on the eMAP viewer. Please refer to later section for more details.
7. **Camera Information Panel**: This panel displays camera information.

Active Map Operation

Archive Player Toolbar

Figure 5-2 Active eMap Toolbar

1. **Active Monitor**: Click on this button to go to the Active Monitor application.
2. **Archive Player**: Click on this button to go to the Archive Player application.
3. **Active E-Map**: Click on this button to go to the Active E-Map application.
4. **Setup**: Setup the System, Camera and E-Map.
5. **Full Screen**: Click to bring the map into full-screen mode. To bring the controls back, press ESC key.
6. **Map Tour**: Click on this button toggles map tour functions.
7. **Preview All Mode**: Click to bring all camera preview on the screen. Each preview window will be displayed in QCIF @ 1 FPS to save CPU loading.

TIP: User can also use **F12** to invoke this function. To stretch the video to fit the window, user can use **F11** function key to toggle this function.

Full Screen Mode (F12)

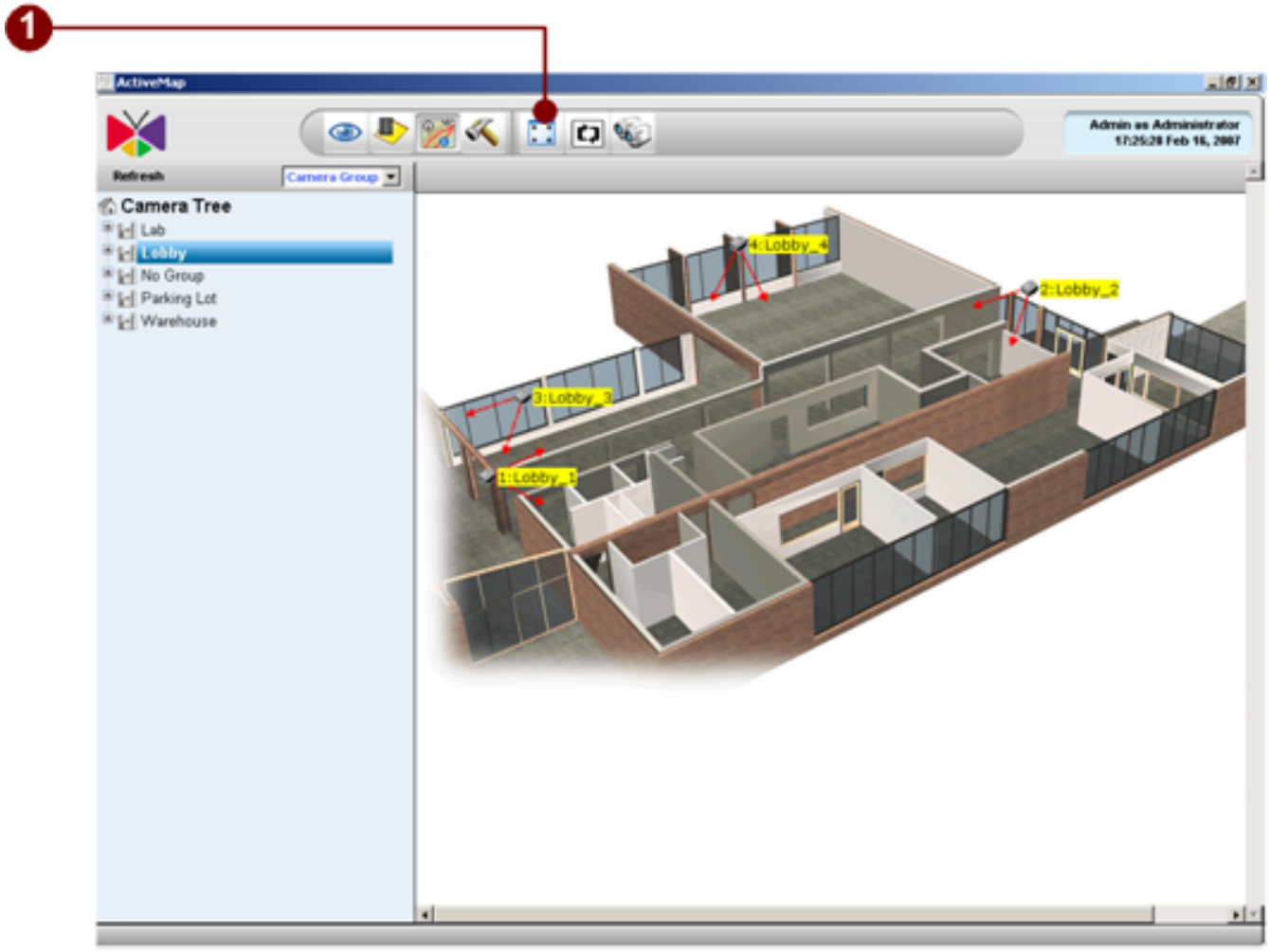


Figure 5-3 Full Screen Button

Full-screen: Click to bring the map into full-screen mode. To bring the controls back, press ESC key.

TIP: Full-screen maximizes the entire layout of videos instead of just the selected window. It will also not expand the video should the size of the window exceeds the maximum resolution of the video.

TIP: User can also use **F12** to invoke this function. To stretch the video to fit the window, user can use **F11** function key to toggle this function.

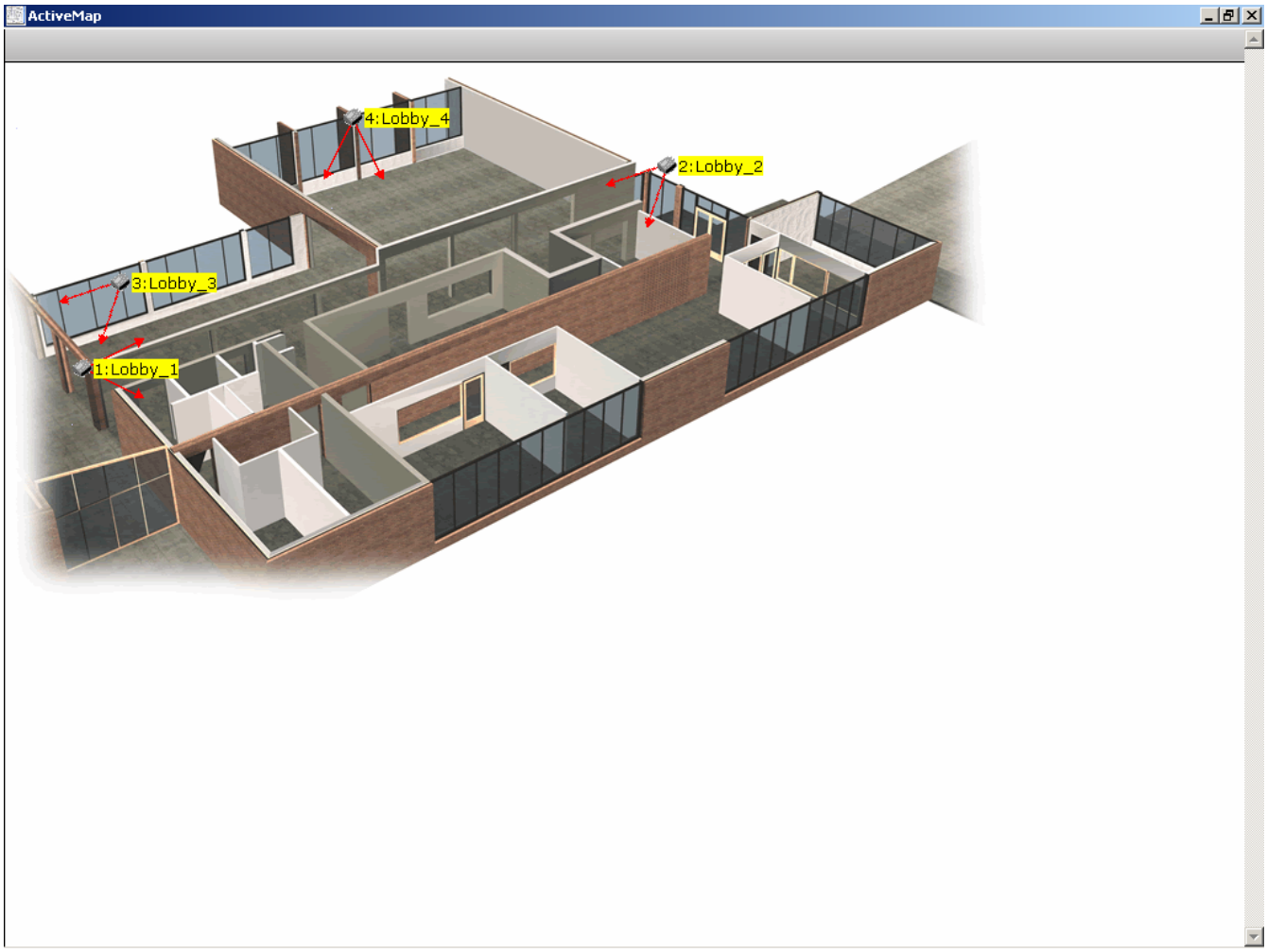


Figure 5-4 Full Screen

Map Tour

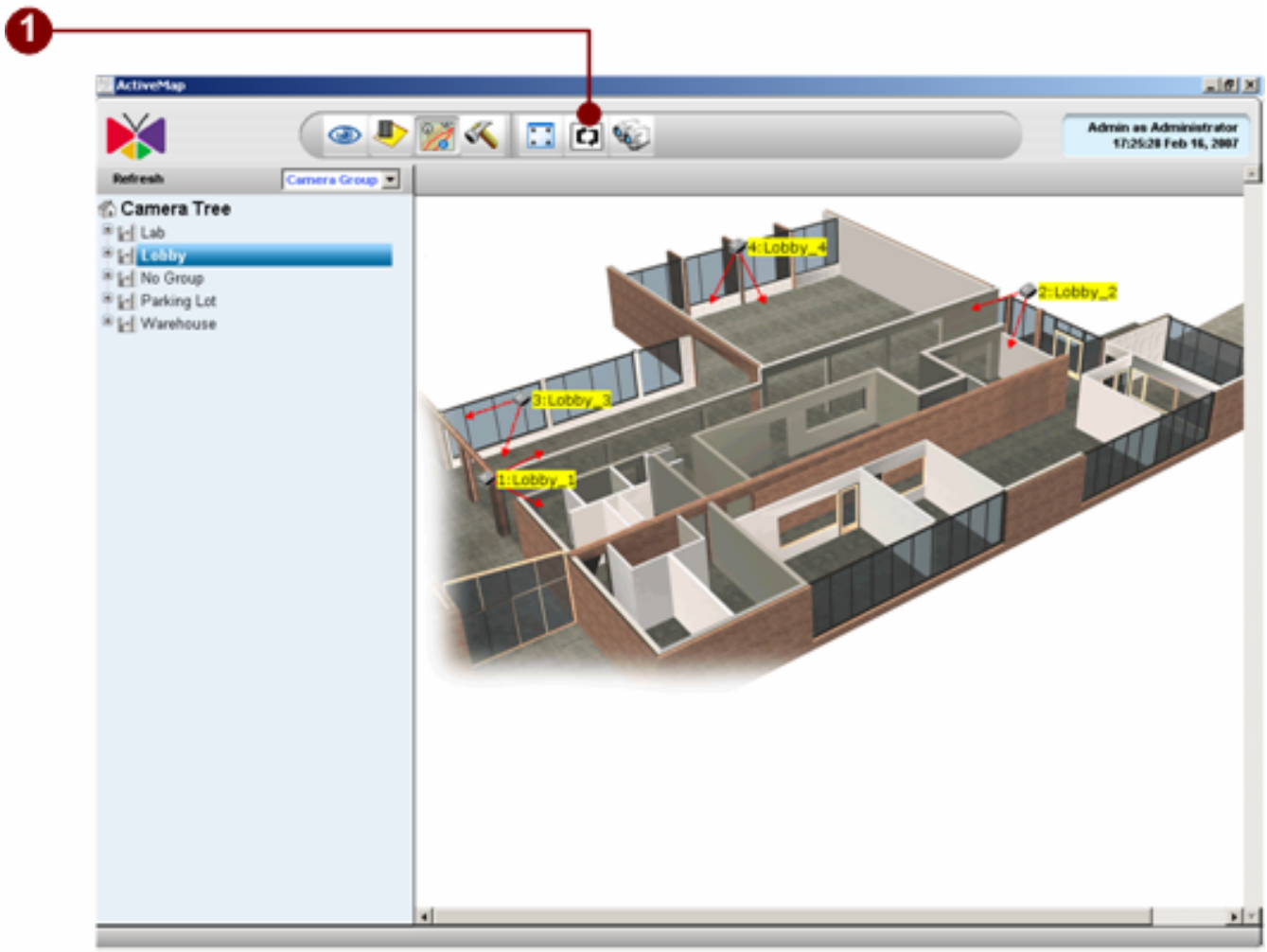


Figure 5-5 Map Tour

1. **Map Tour**: Click to starts/stops map tour. Each map will be displayed with dwell time setting in Map Setup.

Preview All Mode

If user press the “Preview All” button, user will see the mini-display window of each camera in this e-map as below.

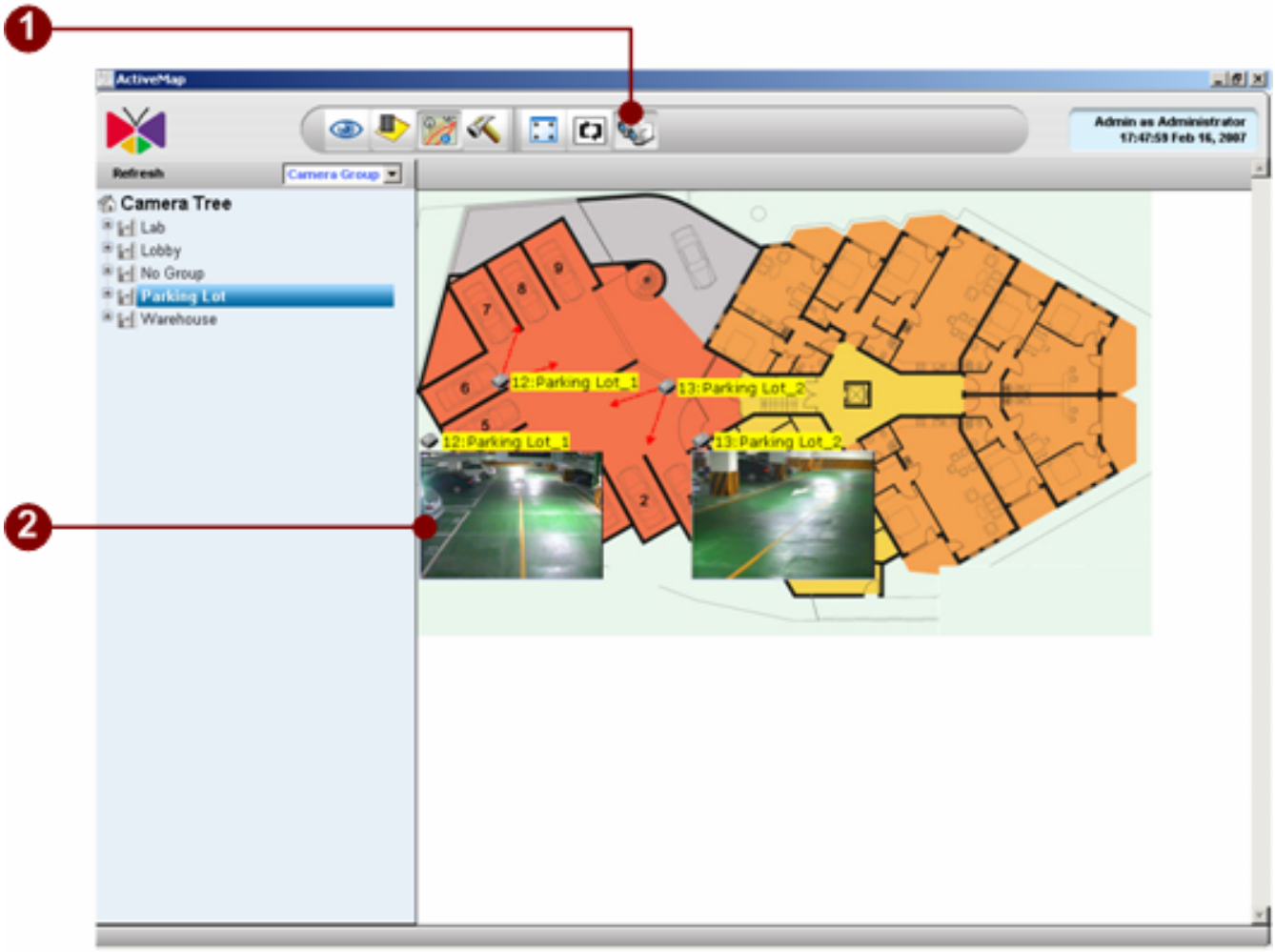


Figure 5-6 Preview All

1. **Preview-All** Button
   Click this button to open/close all mini-preview map on the eMAP viewer.

2. **Mini-preview** Window
   Each mini-preview window contains
   - **Camera Type**: Different device icon indicates different device type.
   - **Camera Channel**: It indicates the channel number of the camera.
   - **Camera Name**: It indicates the camera name of the camera. User can easily know where the image is.
   - **Camera Images**: User can see the camera images.

Quick Preview Mode

Mini-Preview

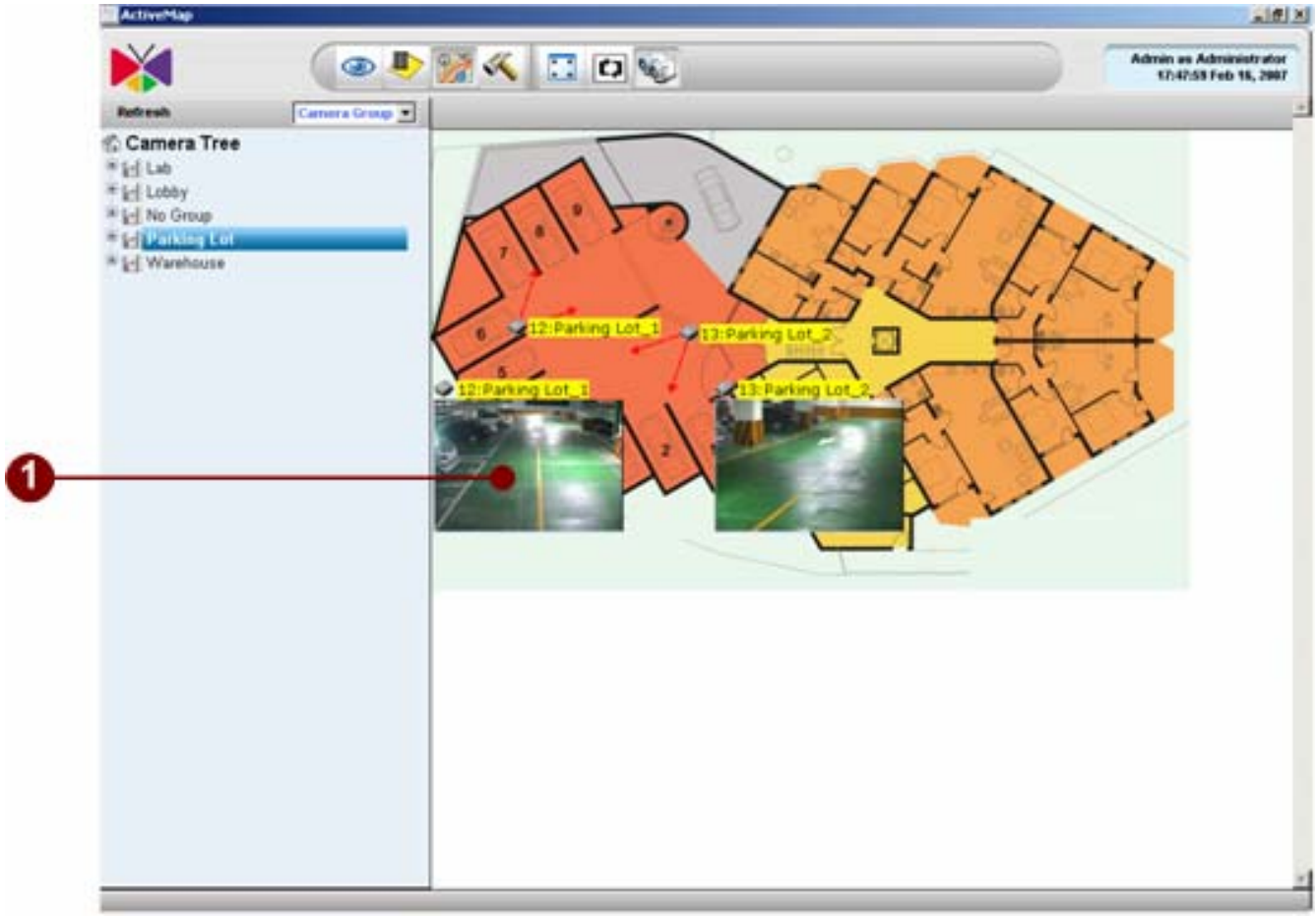


Figure 5-7 Double-Click Preview Window

1. **Mini-Preview**: When double-click on the preview window, the mini-preview window will be brought up; the original resolution and frame rate will be played.

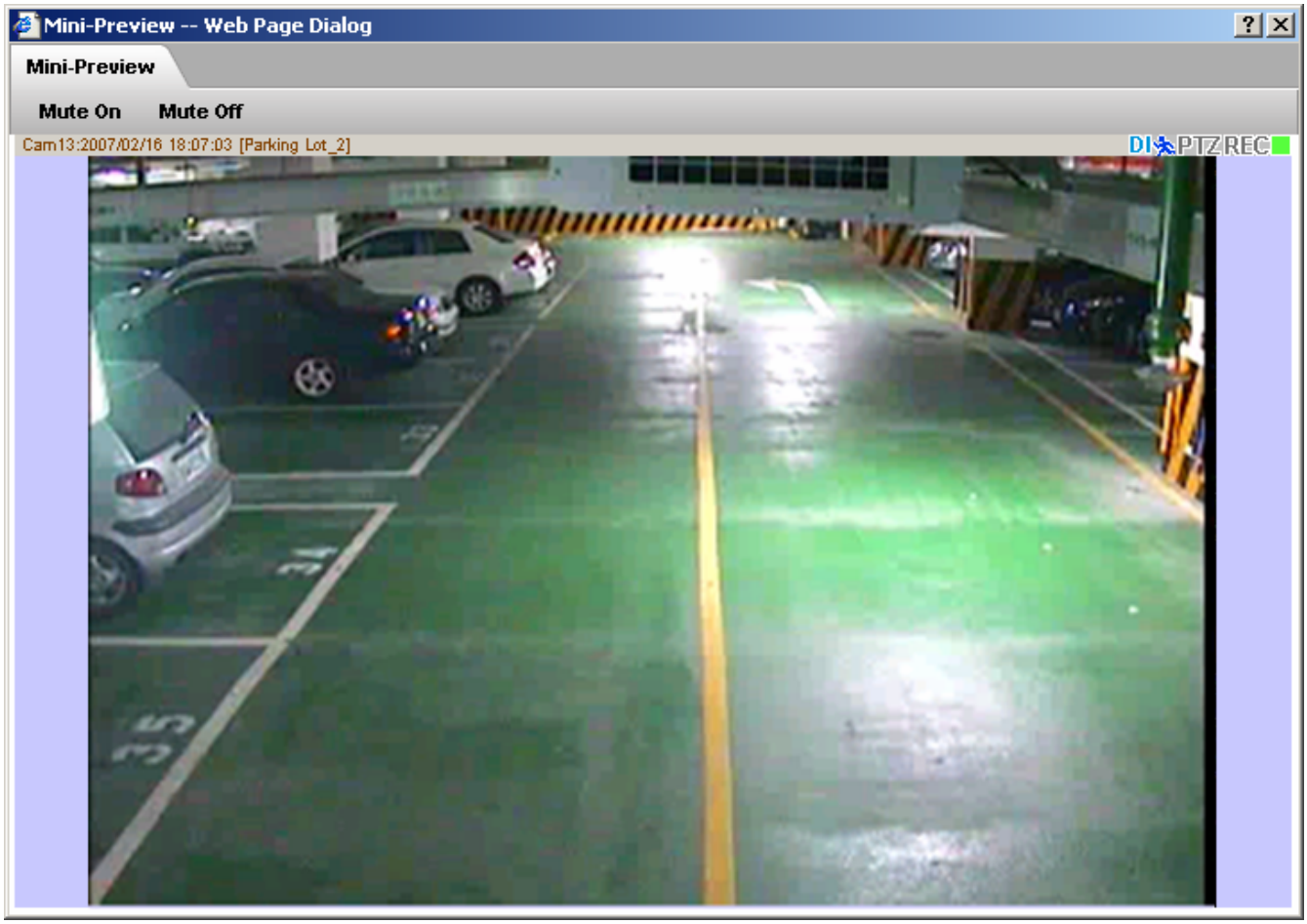


Figure 5-8 Mini-Preview

Event Management on Map

Motion Detection Event Display on Map

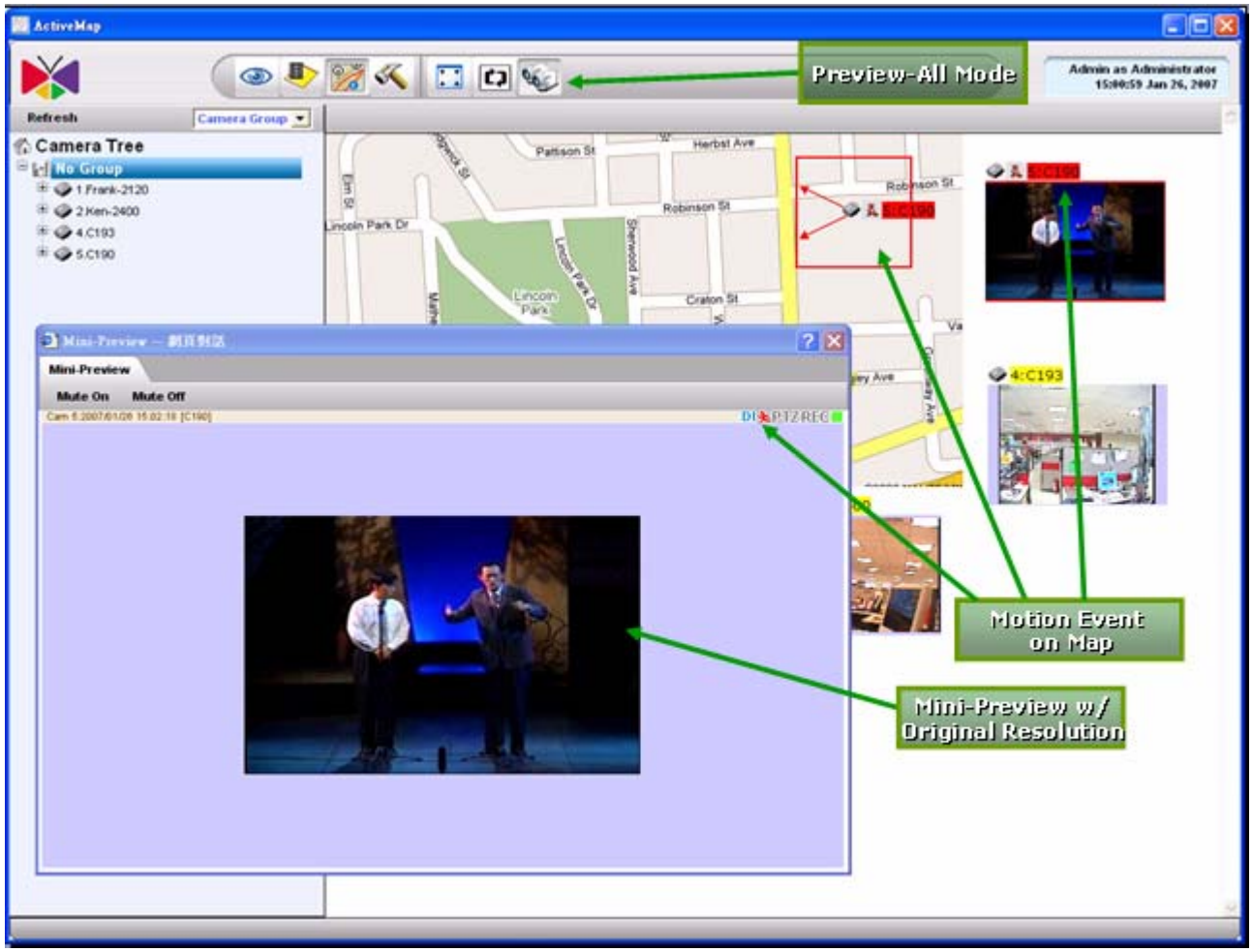


Figure 5-9 Event displays on Map

ActiveMap also displays event on map, including motion detection event and alarm event. This event also displays in Mini-Preview window.

6. NVR Web Client

Introduction

The NVR Web Client (Remote Application) is the application designed to perform all functions included in NVR 2.0 in an Internet Explorer environment. This allows the user to connect to the recording server anywhere on the network without the necessity to install an the NVR application on each PC being used. This section explains the features of the NVR Web Client and procedure to operating it.

IMPORTANT: Only Microsoft Internet Explorer v6.0 and v7.0 is supported. Latest updates should be applied.

IMPORTANT: For security reason, the operating system has to be patched with latest security updates. Refer to http://www.microsoft.com/security for latest security updates.

Web Server Installation

In order to run NVR Web Client, the Web Server has to be installed in the ACTi NVR Server machine.

ACTi NVR Server v2.0 only supports Microsoft IIS (Internet Information Server) as the Web Server offering.

Please refer to **Quick Installation Guide** on how to setup IIS and configuration under IIS.

Pre-requisite for Windows 2000: GdiPlus.dll

With Windows 2000 environment, you need to install GDIPLUS.dll separately. This module is designed by Microsoft.

Download GdiPlus.dll Package from ACTi NVR Server

When you login to ACTi NVR Server with ACTi NVR Web Client running on Windows 2000, .a link will display to lead you to download GdiPlus.dll from ACTi NVR Server and install it directly.

Figure 6-1 Link to lead you to download GdiPlus.dll from ACTi NVR Server

IMPORTANT: The warning message only displays when you run NVR Web Client under Windows 2000 envrionemnt. Please click here link to download the prerequiste utility, GDIPLUS.DLL in order to run NVR Web Client properly

Install GdiPlus.dll Package

After clicking on the link, a setup program will be prompted. Please install it directly. GdiPlus.dll will be installed and copied to Windows directory..

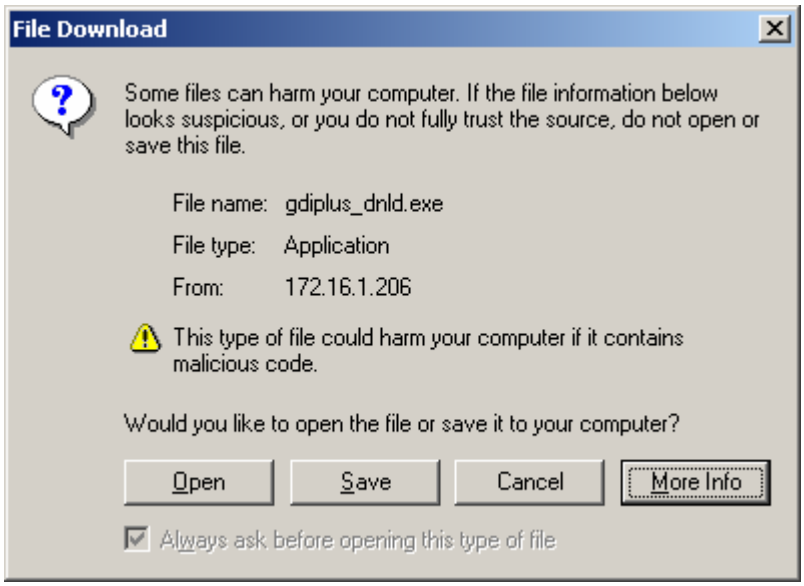

File Download
Some files can harm your computer. If the file information below looks suspicious, or you do not fully trust the source, do not open or save this file.
File name: gdiplus_dnld.exe
File type: Application
From: 172.16.1.206
This type of file could harm your computer if it contains malicious code.
Would you like to open the file or save it to your computer?
Open
Save
Cancel
More Info
Always ask before opening this type of file

Figure 6-2 Click Open to install GdiPlus.dll in C:\Windows

Close ACTi NVR Web Client and Start it Again

After installing GdiPlus.dll to C:\Windows, please close ACTi NVR Web Client and start the application again.

Microsoft Internet Explorer Security Notice

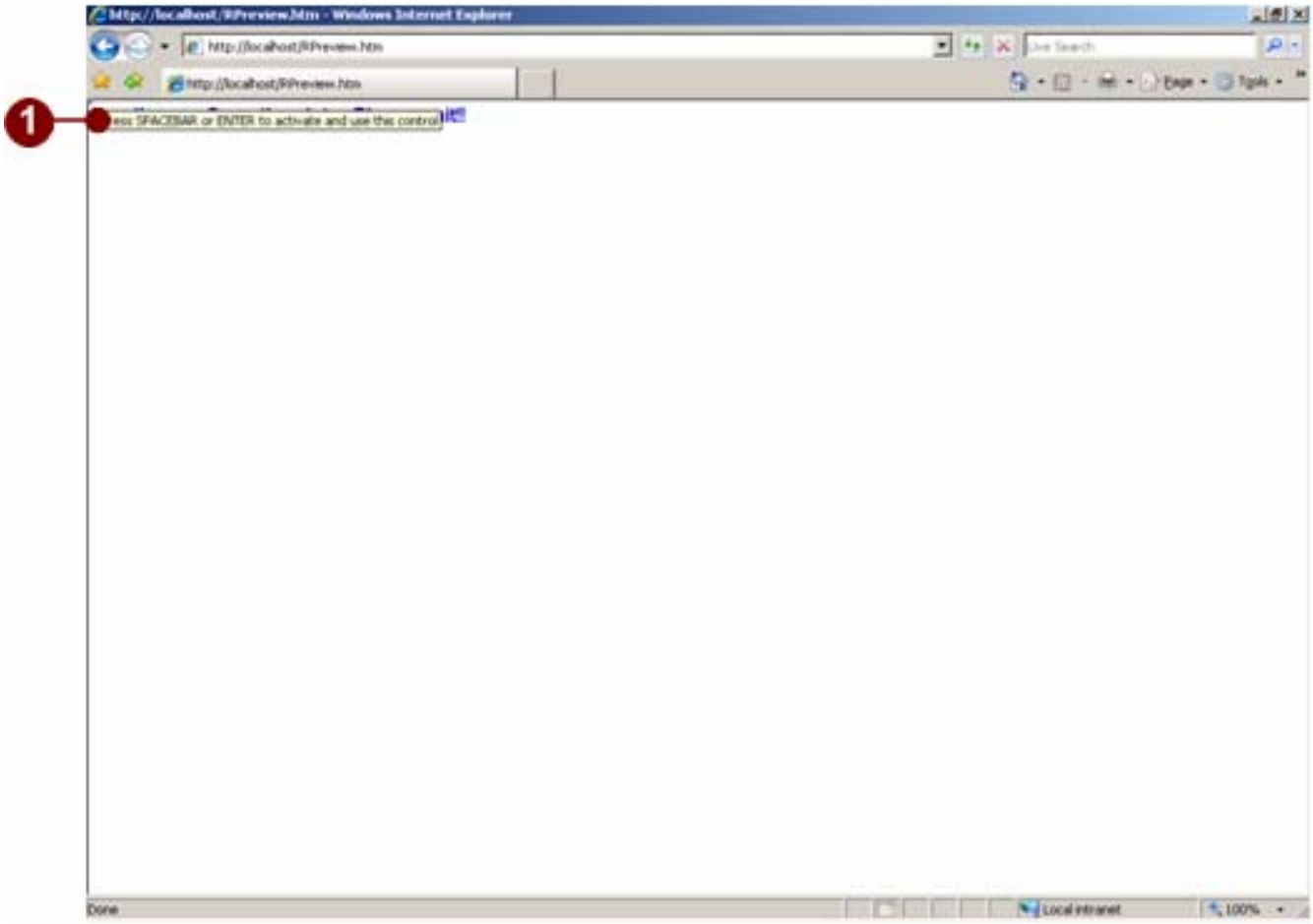


Figure 6-3 Press SPACEBAR or ENTER to activate and use the content

1. **SPACEBAR or ENTER**: Hit Enter key to continue

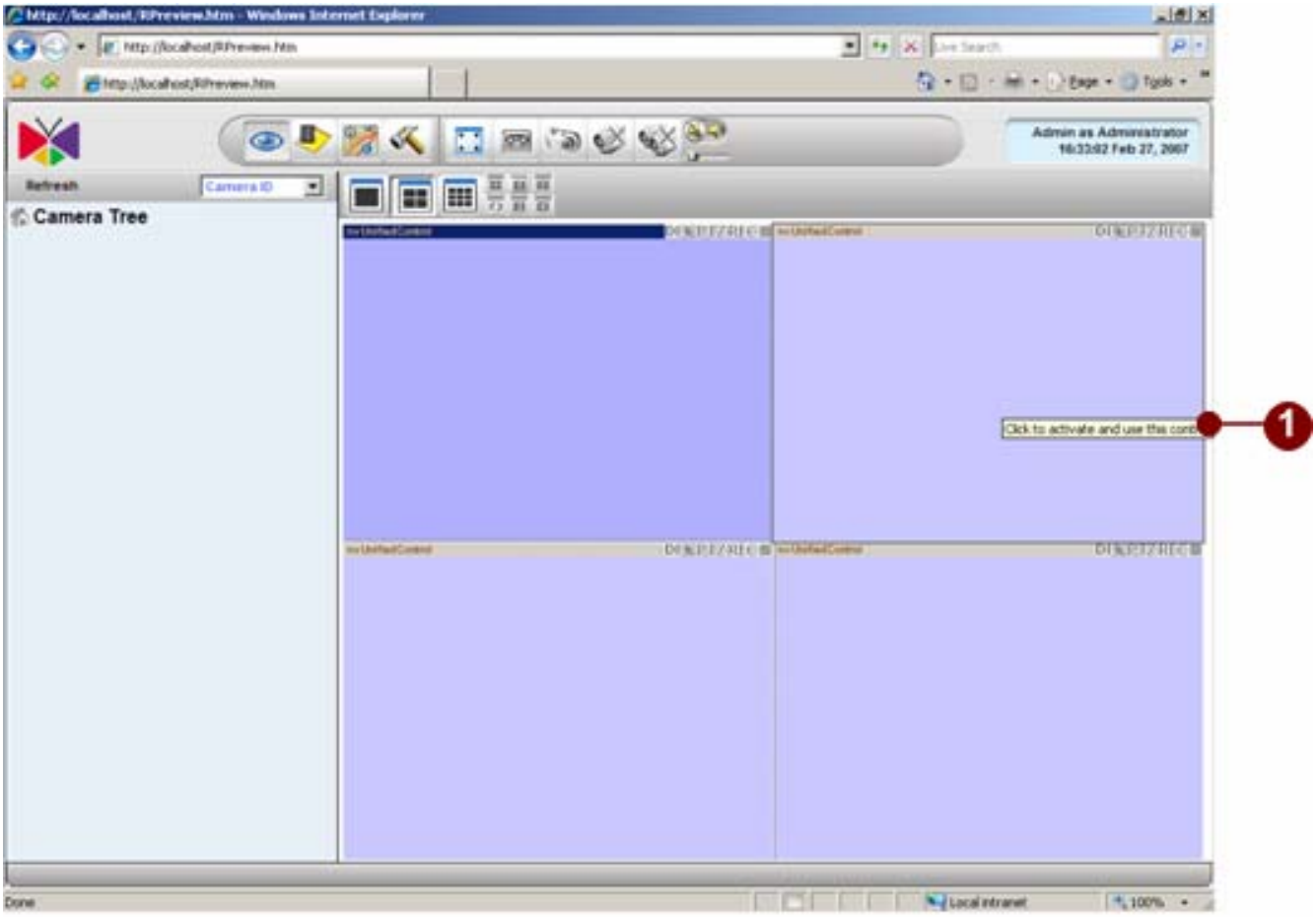


Figure 6-4 Click to activate and use the content

1. **Click**: Click to activate and use the content. For security reason, Microsoft Internet Explorer will display this information when the system starts. Please click on the window before using the system.

IMPORTANT: Due to Microsoft's security policy, user has to click on the control one by one before using the system.

Web Preview

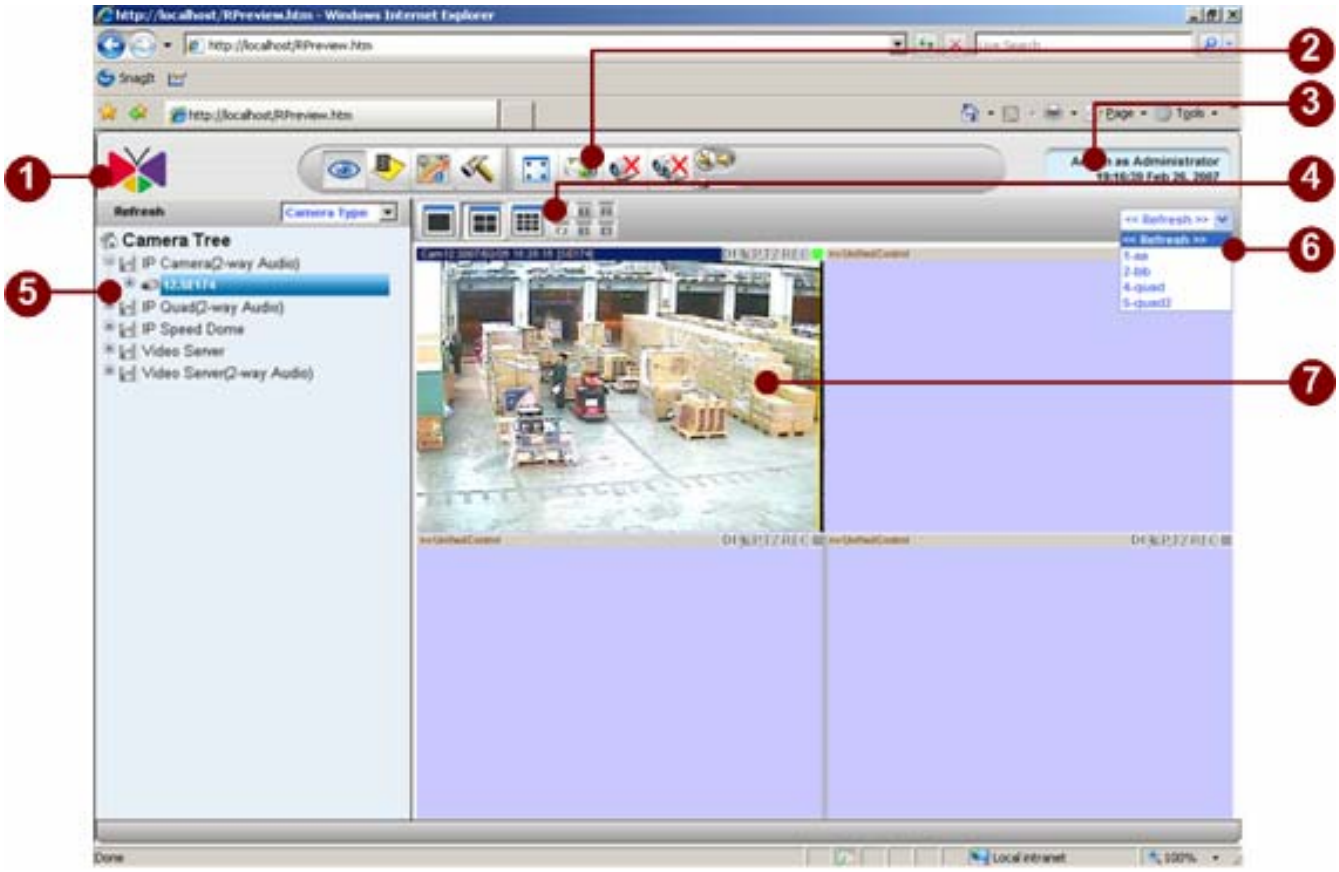


Figure 6-5 Web Preview Interface

1. **About Us**: Click to display current NVR version. Refer to **Check Version** to see a similar display.
2. **Function Bar**: Click each of these icons to perform related tasks. Refer to **Active Monitor Toolbar** to see a similar display and descriptions. Note that the Web Client only has a limited number of selections compared to the actual application.
3. **User Information**: Click to bring up the Personal Profile screen. Refer to **Change Password** to see a similar display and descriptions.
4. **Layout Manager**: Click various icons to bring video to respective multiplexed modes. Refer to **Window Layout Selection** for further details. Note that the Web Client only has a limited number of selections compared to the actual application.
5. **Camera Tree**: Shows information for each of the cameras on the camera tree. Refer to **Camera List** for further details.
6. **Preview Layout**: Shows information for each of the cameras on the camera tree. Refer to

Camera List for further details.

7. **Active Preview window**: Shows the current camera live preview. To see preview, the window must be clicked once, then the camera needs to be dragged from the camera tree to the window.

IMPORTANT: Mouse PTZ will be turned on automatically if this camera is setup with PTZ configuration and the login account is allow to operate PTZ operation.

Web Playback

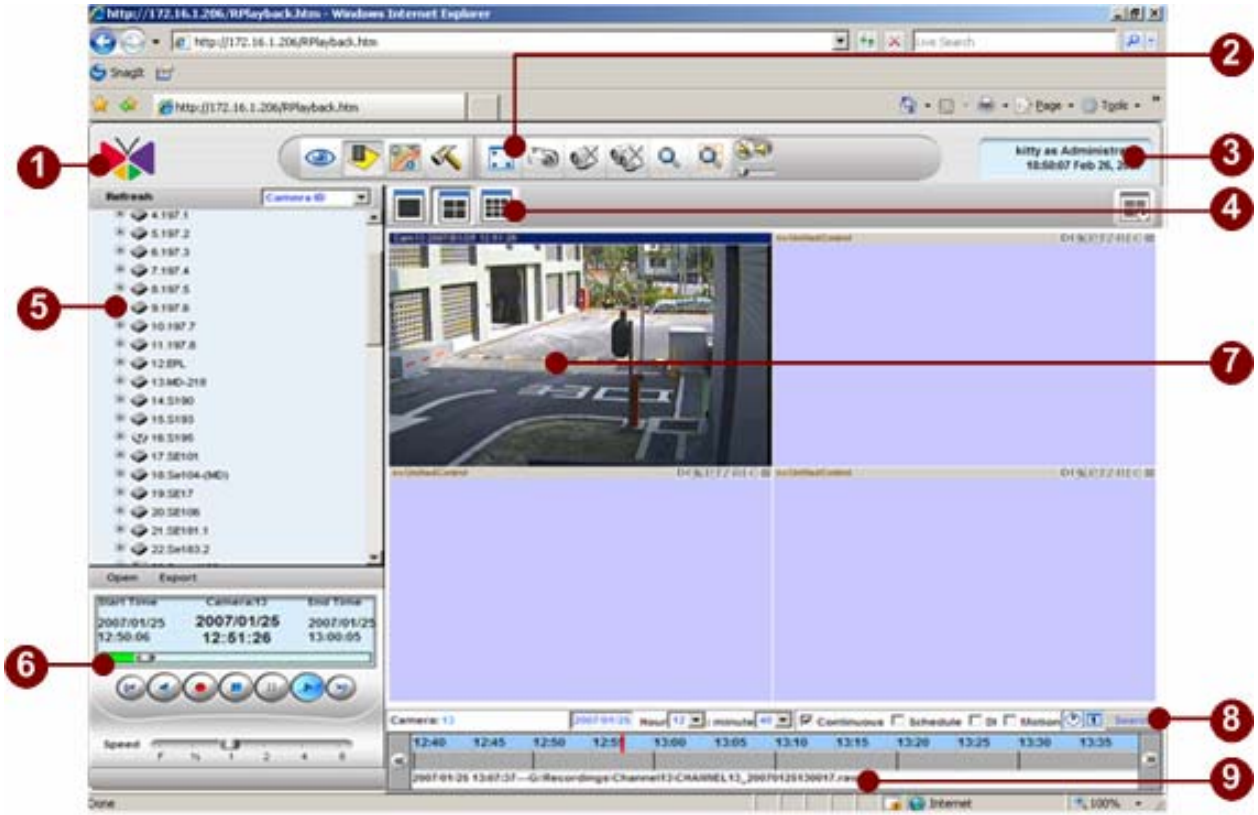


Figure 6-6 Web Playback Interface

1. **About Us**: Click to display current NVR version. Refer to **Check Version** to see a similar display.
2. **Function Bar**: Click each of these icons to perform related tasks. Refer to **Archive Player Toolbar** to see a similar display and descriptions. Note that the Web Client only has a limited number of selections compared to the actual application.
3. **User Information**: Click to bring up the Personal Profile screen. Refer to **Change Password** to see a similar display and descriptions.
4. **Layout Manager**: Click various icons to bring video to respective multiplexed modes. Refer to **Window Layout Selection** for further details. Note that the Web Client only has a limited number of selections compared to the actual application.
5. **Camera Tree**: Shows information for each of the cameras on the camera tree. Refer to **Camera List** for further details.
6. **Playback Panel**: Shows playback information and playback controls. Refer to **Playback Operation** for further details.
7. **Active Preview window**: Shows the current camera playback.
8. **Search Panel**: Shows and allows playback search using time bar. See **Time-based Search Bar** for further details.
9. **Playback File Information**: Shows the file information of the file currently being played.

Web Search

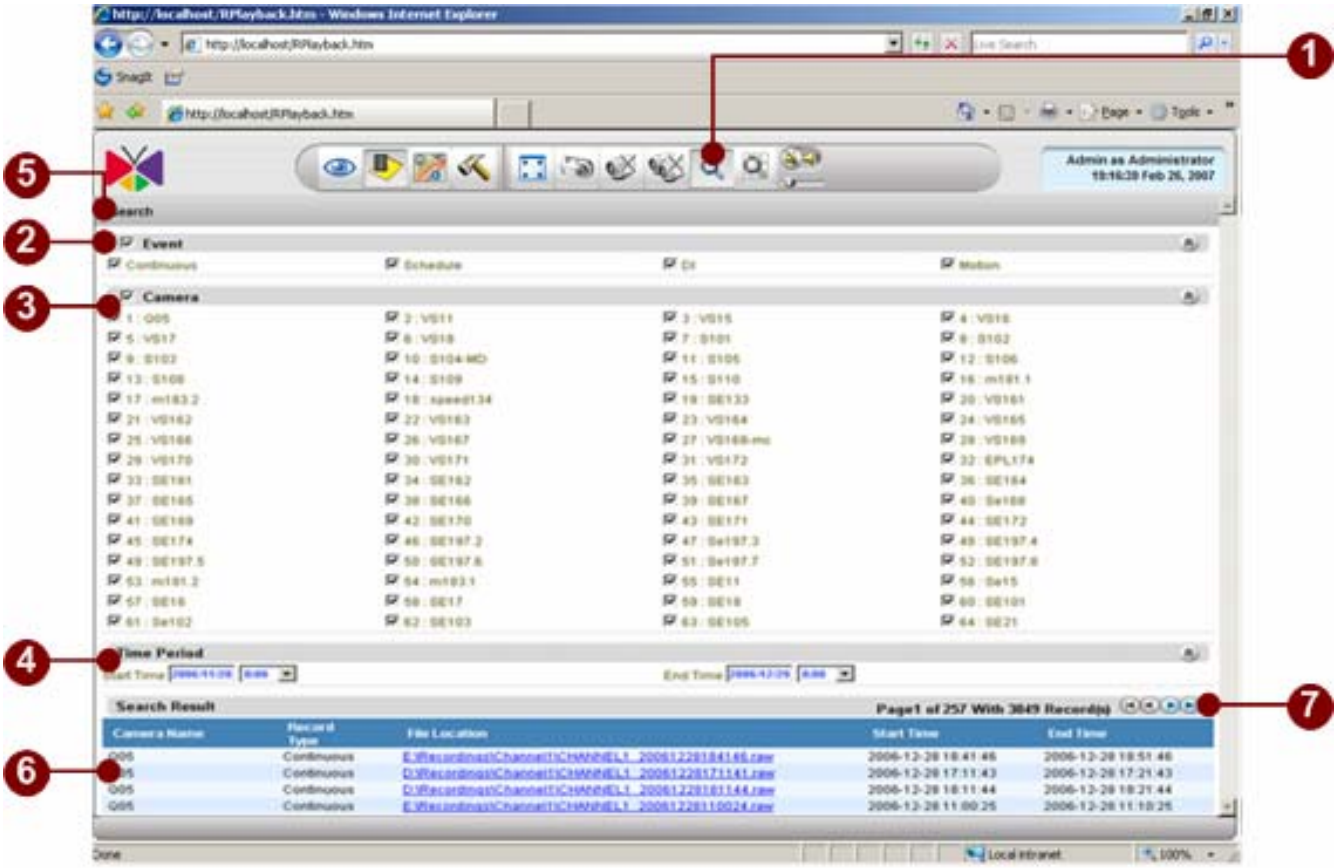


Figure 6-7 Web Search

Most of Web Search is identical to the **Search Event**. Please refer to that section for further details.

1. **Event Search Icon**: Click to show the manual search page.
2. **Choose the Event Type**: After selecting the types of events, cameras, and the search begin and end time, clicking on the Search button shows all that can be found on the database. Clicking the link found plays that file as a whole.
3. **Choose the Camera**: Click to show the manual search page.
4. **Time Period:** Start date / time and end date / time
5. **Search Button**: Click to show the manual search page.

   Search Listing of Camera Name:
6. **Camera Name**: Displays the camera name that matches the search criteria
7. **Page Indicator**: User may traverse the listing to first, last, previous or next page

.

Web Map

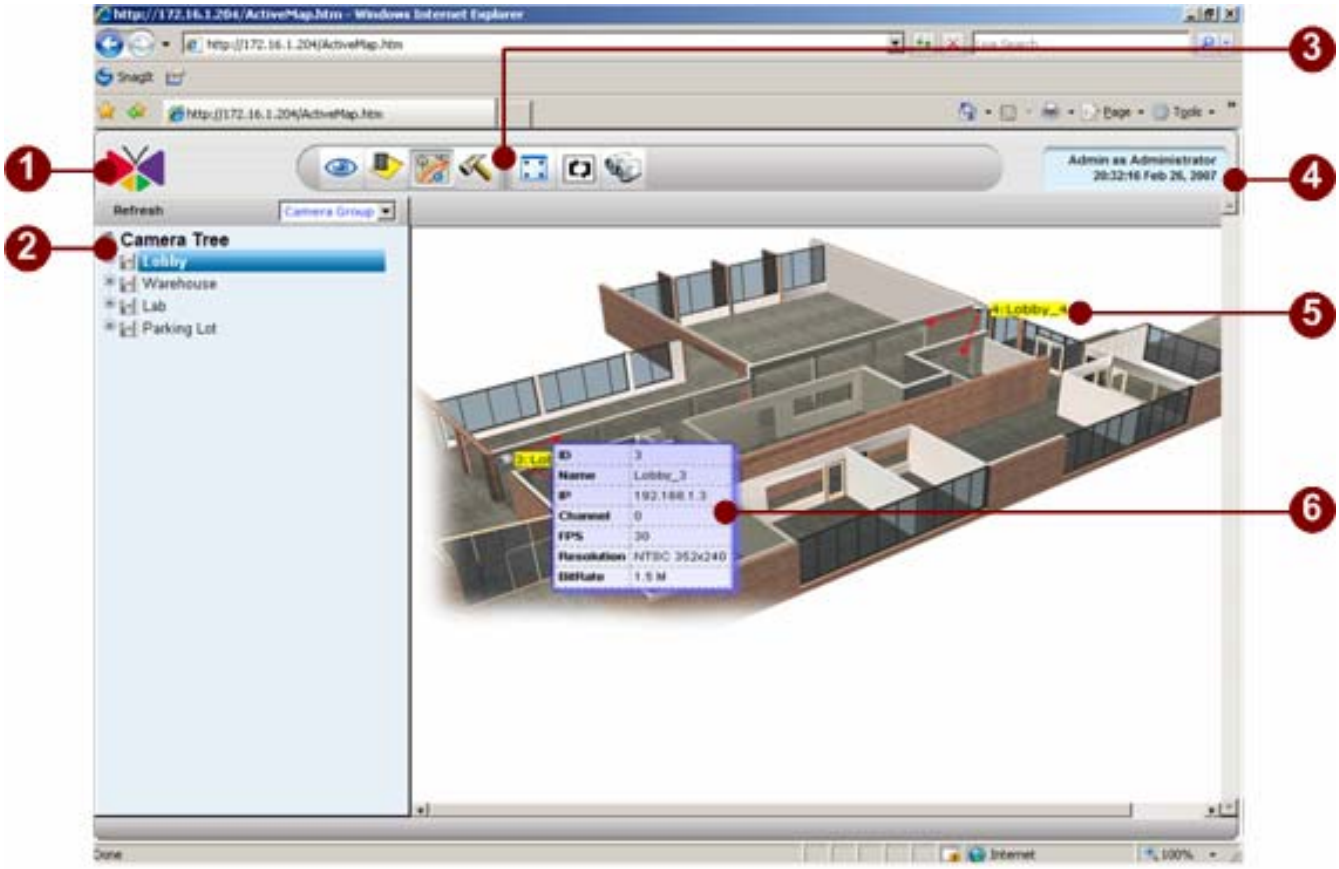


Figure 6-8 Web e-Map

Most of Web e-Map is identical to the **Active Map**. Please refer to that section for further details.

1. **About Us**: Click this button to open the ActiveMonitor in another browser window.
2. **Camera Tree**: Click this button to stretch the eMAP viewer to full screen.
3. **Function Tools Bar**: Click to move to different Web Client applications.
4. **User Information**: Click to bring up user information
5. **Camera Icon**: Click this button to open/close all mini-preview map on the eMAP viewer. Please refer to later section for more details.
6. **Camera Information**: This panel shows the information of the user current using the eMAP viewer. The information includes 1. user name, 2. user authentication level.

Web Setup

NVR Web Client Setup v.s. Active Setup

Due to security reason and user friendliness, following lists the comparison on the functions that supported on NVR Web Client Setup and NVR Workstation Setup. For those functions that supported under NVR Web Client Setup, the functionalities are the same as the ones under NVR Workstation Setup.

Please refer to ActiveSetup section for detailed operations.

IMPORTANT: Due to security reason and user friendliness, some features are not supported under NVR Web Client Setup

System Setup:

Functionalities	*NVR Web Client*	*NVR Workstation*
Camera Group	Yes	Yes
User Group	Yes	Yes
Account	Yes	Yes
User Group	Yes	Yes
Account	Yes	Yes
Storage Management	Yes	Yes
Joystick	Yes	Yes
View Layout	Yes	Yes
Layout Tour	Yes	Yes
Language	Yes	Yes
Service	No	Yes
License	No	Yes
System	Yes	Yes

Camera Setup:

Functionalities	*NVR Web Client*	*NVR Workstation*
Camera	Yes	Yes
Record Path	Yes	Yes
Schedule	Yes	Yes
Alarm	Yes	Yes
Motion	Yes	Yes
PTZ	Yes	Yes
PTZ Preset	Yes	Yes
Preset Tour	Yes	Yes
Event Manager	Yes	Yes

Map Setup:

Functionalities	*NVR Web Client*	*NVR Workstation*
Map Manager	No	Yes
Map Tour	No	Yes

Web System Setup

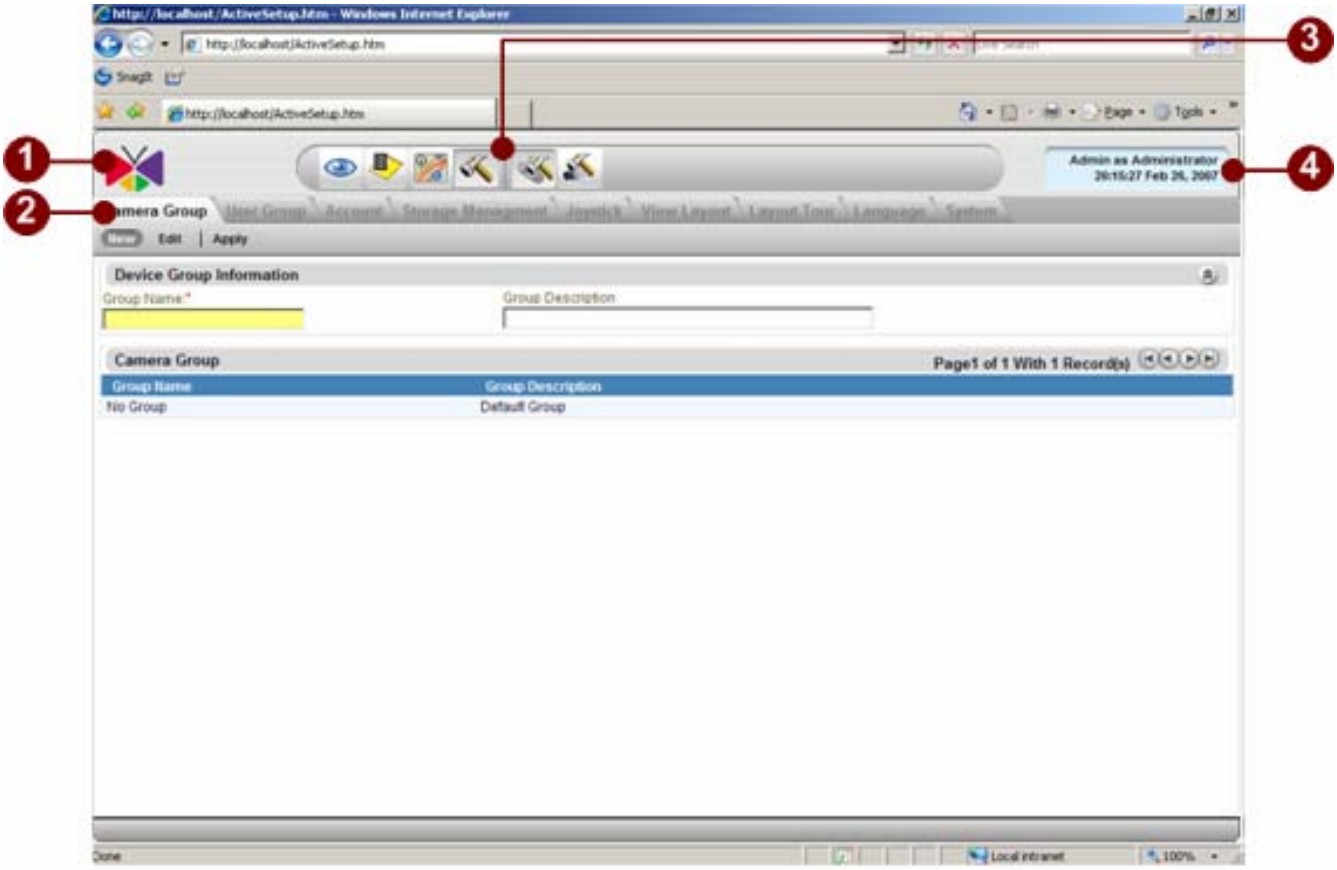


Figure 6-9 Web System Setup

Most of Web System Setup is identical to the **Setup Overview**. Please refer to that section for further details.

1. **About Us**: Click the logo, it will shows software version, system version and company information.
2. **Function Setup**: User can select different setting menus by switching at this toolbar.
3. **Function Tools Bar**: User can configure different function by selecting different icon at this toolbar.
4. **User Information**: This button is for changing password and user interface (UI) language.

Web Camera Setup

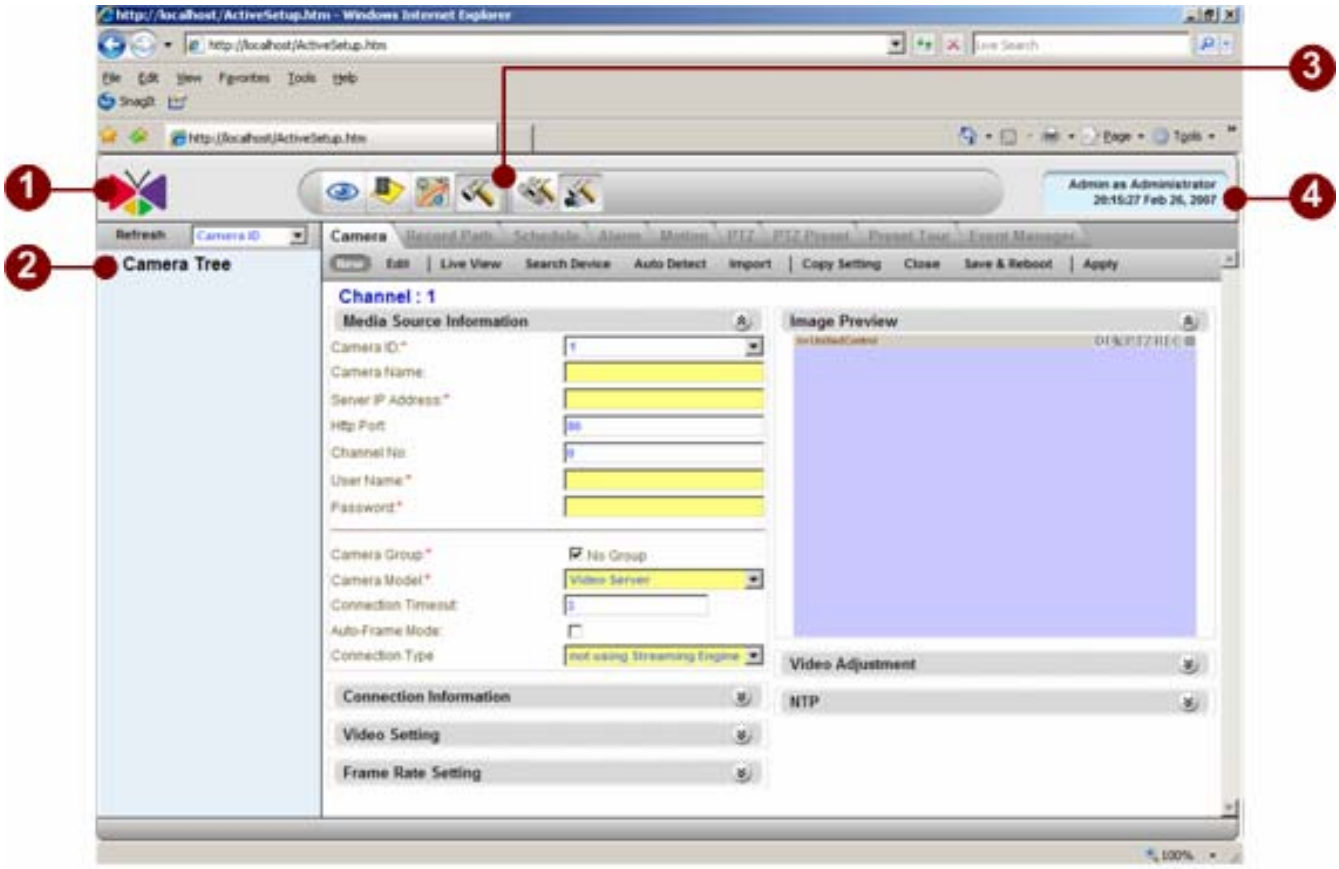


Figure 6-10 Web Camera Setup

Most of Web Camera Setup is identical to the **Camera Setup**. Please refer to that section for further details.

1. **About Us**: Click the logo, it will shows software version, system version and company information.
2. **Function Setup**: User can select different setting menus by switching at this toolbar.
3. **Function Tools Bar**: User can configure different function by selecting different icon at this toolbar.
4. **User Information**: This button is for changing password and user interface (UI) language.

7. Active Setup

Introduction

Description: This Chapter is more important than other chapters and. These setting effects directly if all functions work or not . This Chapter is to teach users how to configure all setting correctly.

This chapter includes 1. Monitor function, 2. Archive Player, 3. eMAP function, 4. Remote Client setting.

Relations with other chapter: This setting bases on correct setup during “Quick-installation-Guide: Software installation”.

Active Setup is the application designed to complete settings for the NVR 2.0. It include`es all setups necessary for the NVR, such as ActiveSetup, ActivePlayback, and ActiveMap. This section explains the interface in detail, as well as gives instructions for some advanced functions explained in previous respective sections.

Setup Operation

There are three groups of setup in the ActiveSetup including [System Setup] , [Camera Setup] and [eMAP Setup]. User should configure [System Setup]=> [Camera Setup]=> [eMAP Setup] in order.

1. [Active Setup]: this setup includes
   i. [System Setup]: system setting.
   ii. [Camera Setup]: camera and camera group setting.
   iii. [eMAP Setup]: eMAP settings.

NOTE: Please configure System Setup first

These three groups can be switched by using the button at upper tool bar. Please see the picture below.

Setup Overview

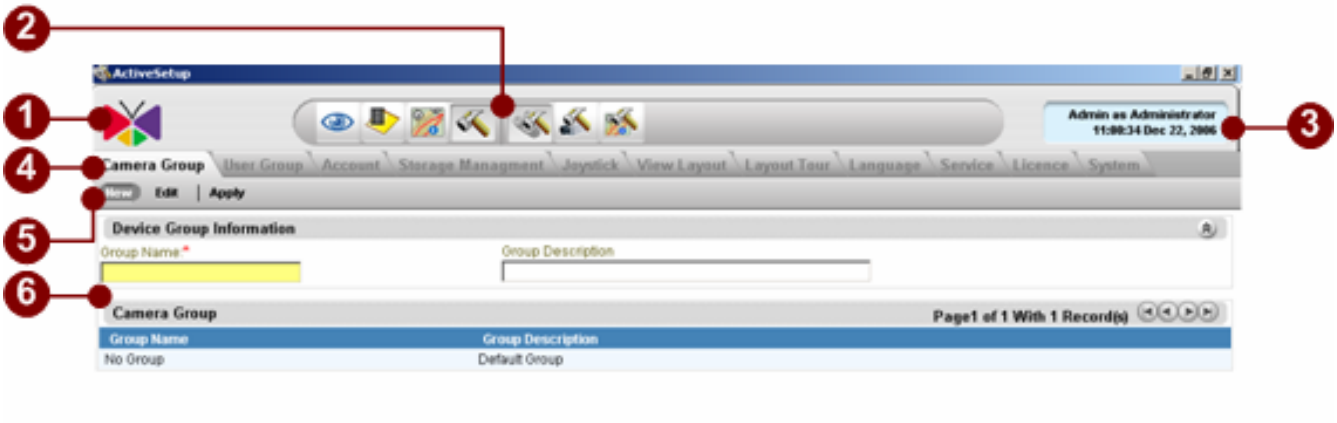


Figure 7-1 User Interface

1. **Logo**: Click the logo, it will shows software version, system version and company information.
2. **Active Setup Toolbar**: User can configure different function by selecting different icon at this toolbar.
3. **Personal Profile**: This button is for changing password and user interface (UI) language.
4. **Setting Toolbar**: User can select different setting menus by switching at this toolbar.
5. **Modify Button**: User can create or edit setting in this section.
6. **Setting Information**: all setting information will be shown in this section, user can update all setting and see all information here.

Active Setup Toolbar

Figure 7-2 ActiveSetup Tool Bar

8. **Active Monitor Button**: User can click this button to switch to Active Monitor program.
9. **Active Player Button**: User can click this button to switch to Active Player program.
10. **Active eMap Button**: User can click this button to switch to Active eMap program.
11. **Active Setup Button**: It shows that use rare using ActiveSetup program.
12. **System Setup Button**: User can click this button to switch to System Setup.
13. **Camera Setup Button**: User can click this button to switch to Camera Setup.
14. **eMAP Setup Button**: User can click this button to switch to eMAP Setup.

System Setup

[System Setup] lets user setup the ACTi NVR system settings including camera grouping, user grouping, account management, storage management, monitor layout, language setup, service setup, license management and system information. Please refer to the sections below for details.

Camera Group

This sections lets user setup camera groups. This section is important because ACTi NVR's management is based on camera groups. It will affect eMAP setup, camera setup and user authority.

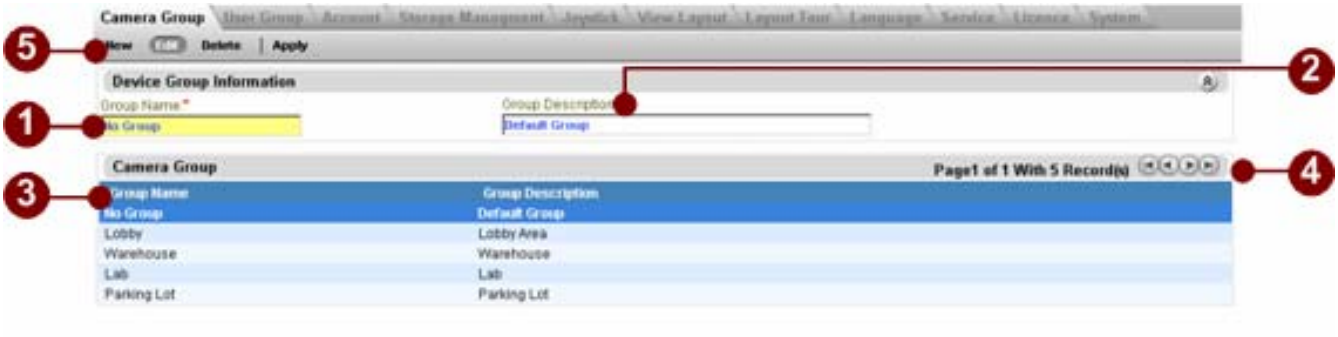


Figure 7-3 Camera Group Setup

1. **Group Name**: Enter the camera group name for a new camera group or modify existing camera groups.
2. **Group Description**: Enter the description of this camera group.
3. **Group List**: User can see all the group created here.
4. **Panel Control of Group List**: User can use this control to switch between pages of camera group list.
5. **Modify button**: Click these buttons to modify camera group. It includes:

   New button: Click this to create a new camera group.

   Edit button: Click this button to edit the existing camera group selected in the group list.

   Delete button: Click this button to delete a camera group.

   Apply button: Click this button to save current settings.

User Group

To ensure all functions will work perfectly in ACTi NVR 2.0 user has to

Step1. Create different user groups
Step2. Assign user permission to each user group
Step3. Assign each user to a user group

This section lets user do step1 and step2. The Step3 is done at the later setion of “Account”.

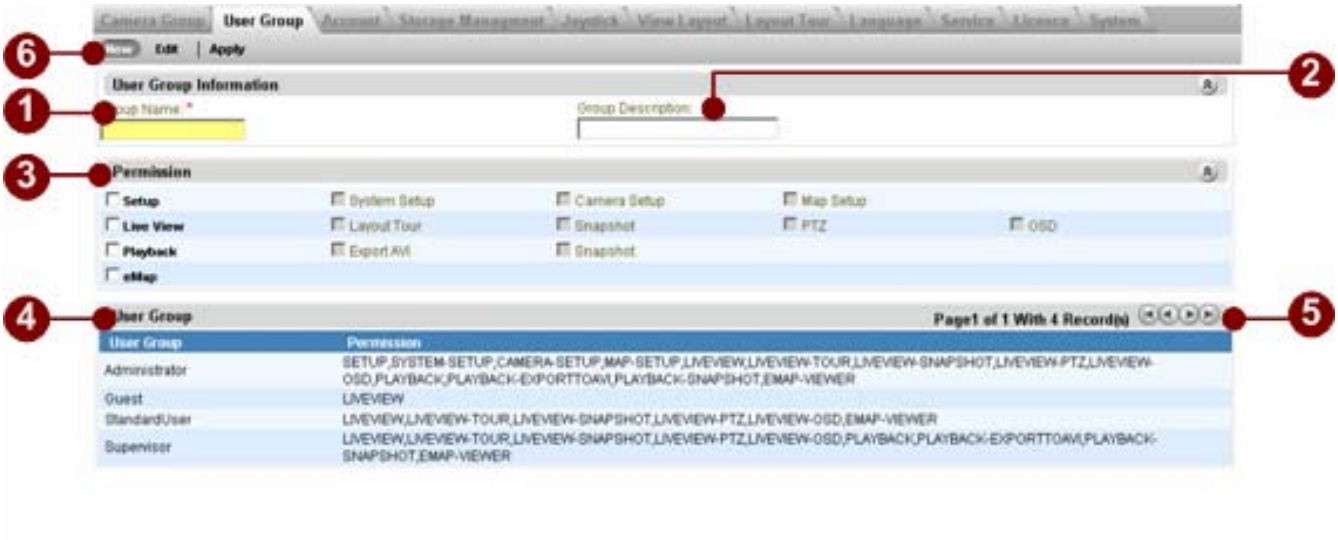


Figure 7-4 User Group Setup

1. **Group Name**: Enter the user group name for a new camera group or to modify existing user group.
2. **Group Description**: Enter the description of this user group.
3. **Permission Selection Pane**l: In this panel, administrator can authorize any functions for each group.
4. **User Group List**: User can see all the group created here. And see each group’s authorization level.
5. **Panel Control of User Group List**: User can use this control to switch between pages of user group list.
6. **Modify button**: Click these buttons to modify camera group. It includes:

   New button: Click this to create a new camera group.

   Edit button: Click this button to edit the existing camera group selected in the group list.

   Apply button: Click this button to save current settings

Account

To ensure all functions will work perfectly in ACTi NVR 2.0 user has to

Step1. Create different user groups
Step2. Assign user permissions to each user group
Step3. Assign each user to a user group

This section lets user do step3. The step1 and step2 are done at the previous section of “User group”.

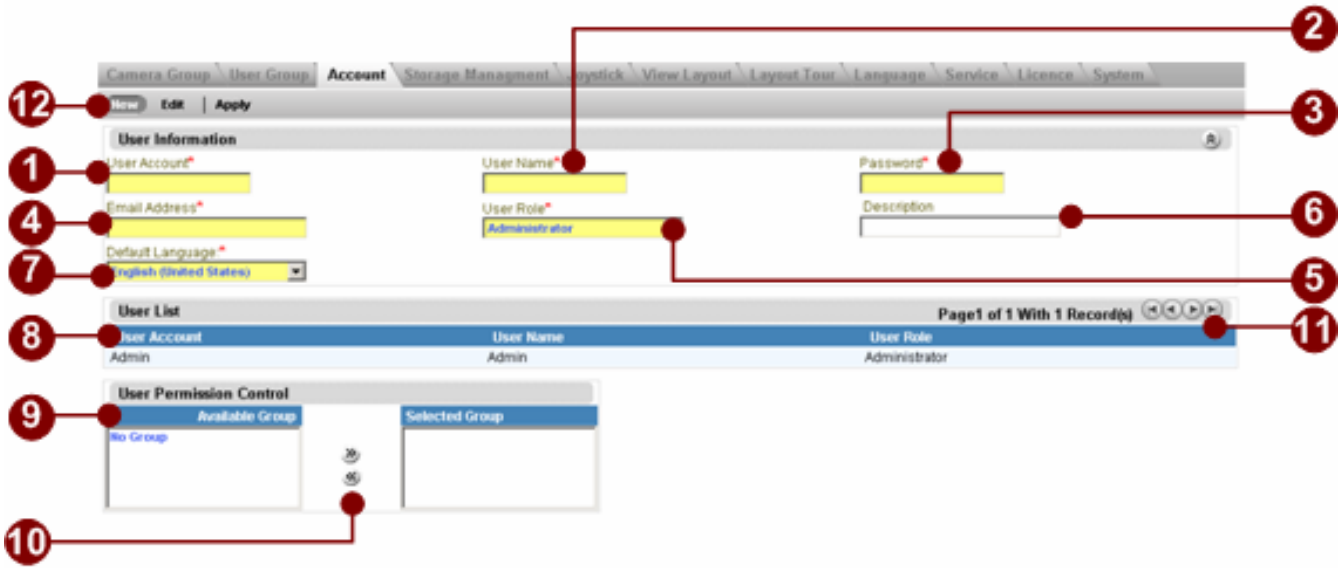


Figure 7-5 Account Setup

1. **User Account**: Enter the user account name for a new user or modify an existing user. This user account name will be used for this user to login the ACTi NVR system.
2. **User Name**: Enter the user name of this account. This name is a reference data for this account and will NOT be used for user to login ACTi NVR in the future.
3. **Password**: Enter the password for this user account to login ACTi NVR system.
4. **E-mail Address**: Enter the E-mail address for this user. It can be used for administrator to contact this user in the future.
5. **User Role**: Select user group which this user belongs to. The user group settings is set in previous section of [User Group].
6. **User Description**: Enter the description of this user.
7. **Default Language**: Select a language of the user-interface when this user login the ACTi NVR.
8. **User List**: User can see all the existing user here.
9. **User Permission Control panel**: In this panel, user can select which camera group is available to this user. The user can only see cameras available to them.
10. **Select/Deselect button**: Click to move/remove a camera group available to this user.
11. **Panel Control for User list:** user can use this panel to switch between different pages of user

list.

12. **Modify button**: Click these buttons to modify user account. It includes:
    New button: Click this to create a new user account.
    Edit button: Click this button to edit the existing user account selected in the user list
    Apply button: Click this button to save current settings.

Storage Management

This section shows how recording setup is done. It includes:

Path for storing recording.

Hard drive for storing recording.

The cycling rule of the recording /snapshots

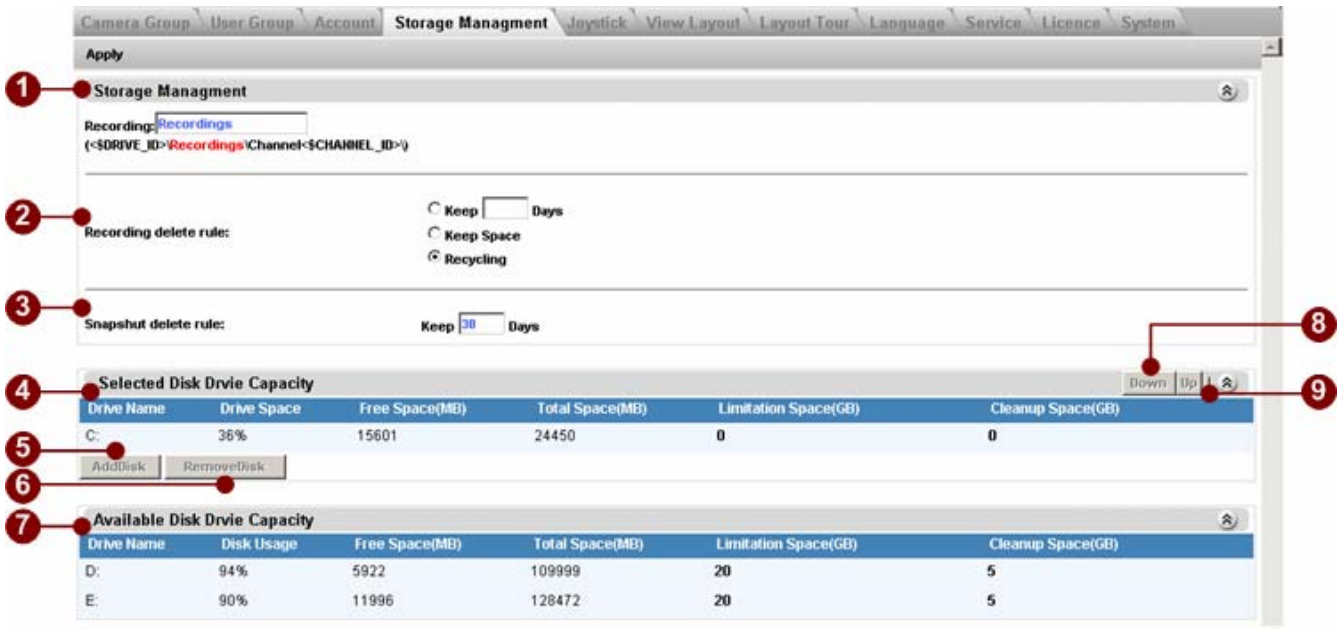


Figure 7-6 Storage Management

1. **Recording Path**: Enter the main folder name for the recording on one hard drive. ACTi NVR will automatically create a folder with the same name on the hard drive, and store all recording on it. Moreover, ACTi NVR will create sub-folders for each channel to store the recording.
2. **Recording Delete Rule**: Select the recording rule. There are 3 rules, see below for details.
3. **Keep ? Days** : When it is selected, user must enter a number. ACTi NVR will save for the period which user chooses, and when the period expires, the recording will be delete gradually and automatically.
4. **Keep Space** : When it is selected, ACTi NVR will reserve some space for recording storage/delete mechanism. If there no sufficient space left, system will starts to delete the oldest recordings.
5. **Recycling** :When it is selected, ACTi NVR will reserve some space for recording storage/delete mechanism. If there no sufficient space left, system will starts to delete the oldest recordings.
6. **Snapshot Delete** Rule: Select the number of days for which the snapshots will be kept. Snapshots will be kept for a period of time and after this period of time expires, ACTi NVR

will delete snapshots gradually and automatically.

7. **Selected Disk List & Capacity**: User can see the recording hard drive list. Recordings will be saved onto hard drives on this list.
8. **Add Disk:** Click this button to add a hard drive to the recording hard drive list.
9. **Remove Disk:** Click this button to remove a hard drive from the recording hard drive list.
10. **Available Disk List & Capacity**: This list shows other drives available for recording.
11. **Priority down button:** Click this button to lower disk priority for recording. The lower Hard drive priority is, the later the hard drive will be used to store recording..
12. **Priority up button:** Click this button to move selected disk priority higher. Hard drives with higher priority will be recorded first.

NOTE: If there's not enough space left in the hard drive for recording, the ACTi NVR will automatically deletes the oldest recordings.

Joystick

This section is for user to configure the joystick or analog control panel. If not using any joystick or control panel, user can skip this section. ACTi NVR's PTZ function can be controlled by either a joystick or an analog control panel at a time. Analog control panel and joystick will not work the same.

NOTE: For analog control panel, ACTi NVR will forward all serial command to remote cameras. For Joystick, the ACTi NVR receives joystick signal and operates an action according to user defined actions (P/T/Z, Trigger DI/DO… and etc.)

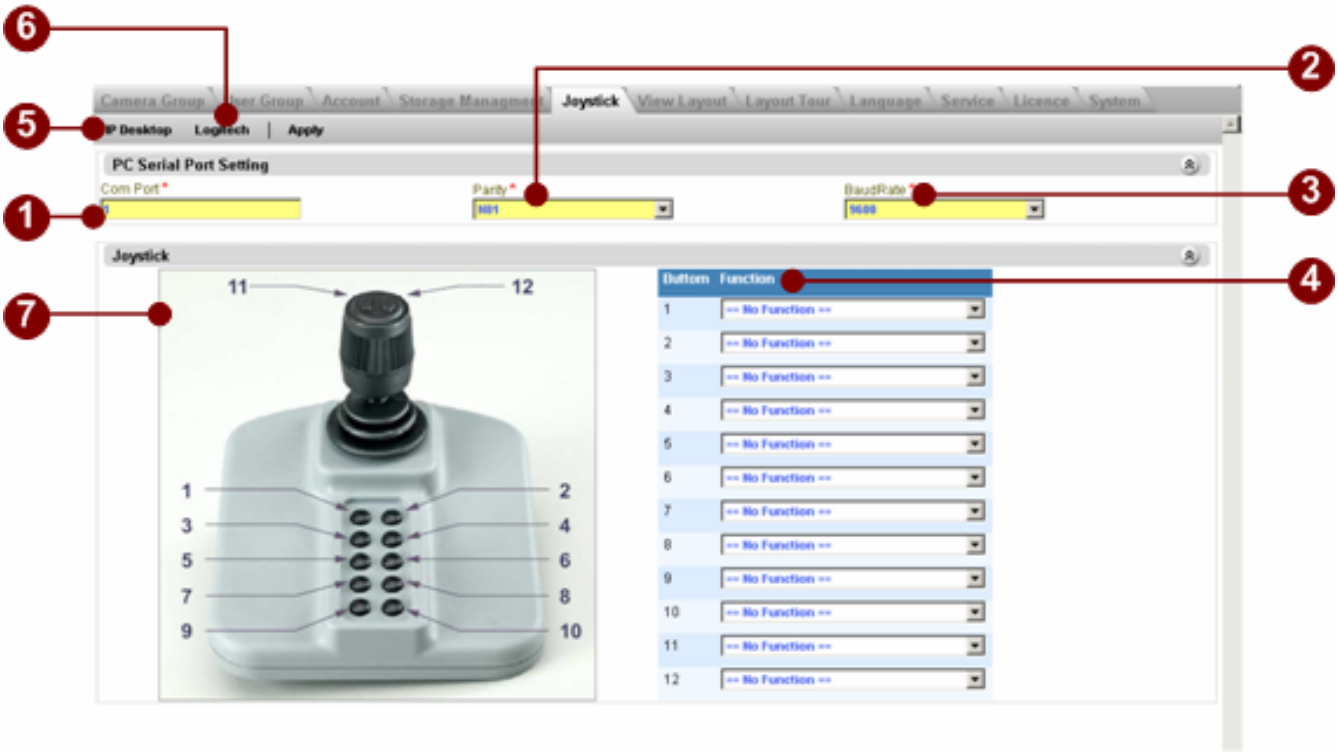


Figure 7-7 Joystick Setup

1. **Com Port** : Enter a com port number which the control panel connects to the PC of the ACTi NVR.
2. **Parity** : Enter the parity type of the control panel serial connection. This has to be exactly the same as the control panel, otherwise the PTZ command will not work.
3. **Baud Rate** : Enter the baud rate of the control panel serial connection. This has to be exactly the same as the control panel, otherwise the PTZ command will not work.
4. **Joystick Function Setting**: User can assign different function to different buttons, User-defined functions can make joystick a powerful and friendly tool to control PTZ functions.

5. **Select joystick of IP Desktop**: There are two joysticks (IP desktop/Logitech) supported by ACTi NVR. Please select the correct model.
6. **Select joystick of Logitech**: There are two joysticks (IP desktop/Logitech) supported by ACTi NVR. Please select the correct model.
7. **Joystick Picture:** When any joystick is selected, user can see the picture of the joystick there.

NOTE: The USB IP Joystick shown here can be found at: http://www.chproducts.com

View Layout

This section is for user to select different types of view layouts. These preset layouts can be later selected by guards to fast switching different groups to monitor in ActiveMonitor. For example, User can have two preset groups of camera, one is Entrance (camera 1~16) and the other is Hall way (camera 17~32). Simply selecting the hall way/entrance view layout, guards can switch camera groups from 1~16 to 17~32.

User also can let system switch between these two layouts automatically. Please refer to nex section of [Layout tour] for details.

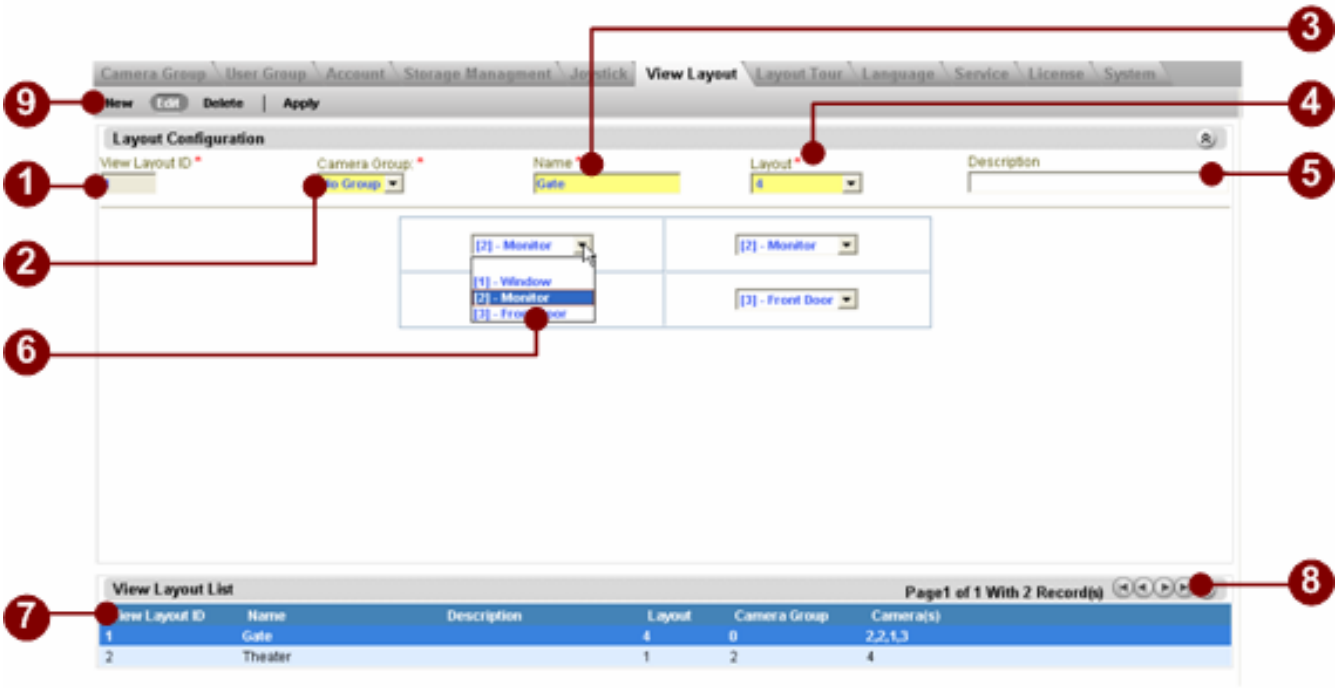


Figure 7-8 View Layout

1. **View Layout ID**: Each view layout has a unique view layout ID stored in the system. The ID column is assigned automatically by the system.
2. **Camera Name**: Select camera group list that user wants to preview.
3. **Layout Name**: Enter the name for a new layout list or to modify an existing view layout list
4. **Layout**: Select the view layout channel number for this view layout.
5. **Description**: Enter the description of this view layout
6. **Layout Setting**: Select the cameras user wants to view in this view layout.
7. **View Layout List**: User can see all the existing view layout list here.
8. **Panel Control of view layout list**: User can use this control to switch between pages of view

layout list

9. **Modify button:** Click these buttons to modify View Layout. It includes:
10. **New button:** Click this button to create a new view layout
11. **Edit button:** Click this button to edit the existing view layout tour selected in the group list
12. **Apply button:** Click this button to save current settings**.**

Layout Tour

In previous section of [view Layout], user can set view layouts. This section, user can learn how to switch between different view layouts automatically. This can be an easy way for user to monitor many channels.

NOTE: the previous section [View Layouts] must be configured before user selects them into layout tour in this section.

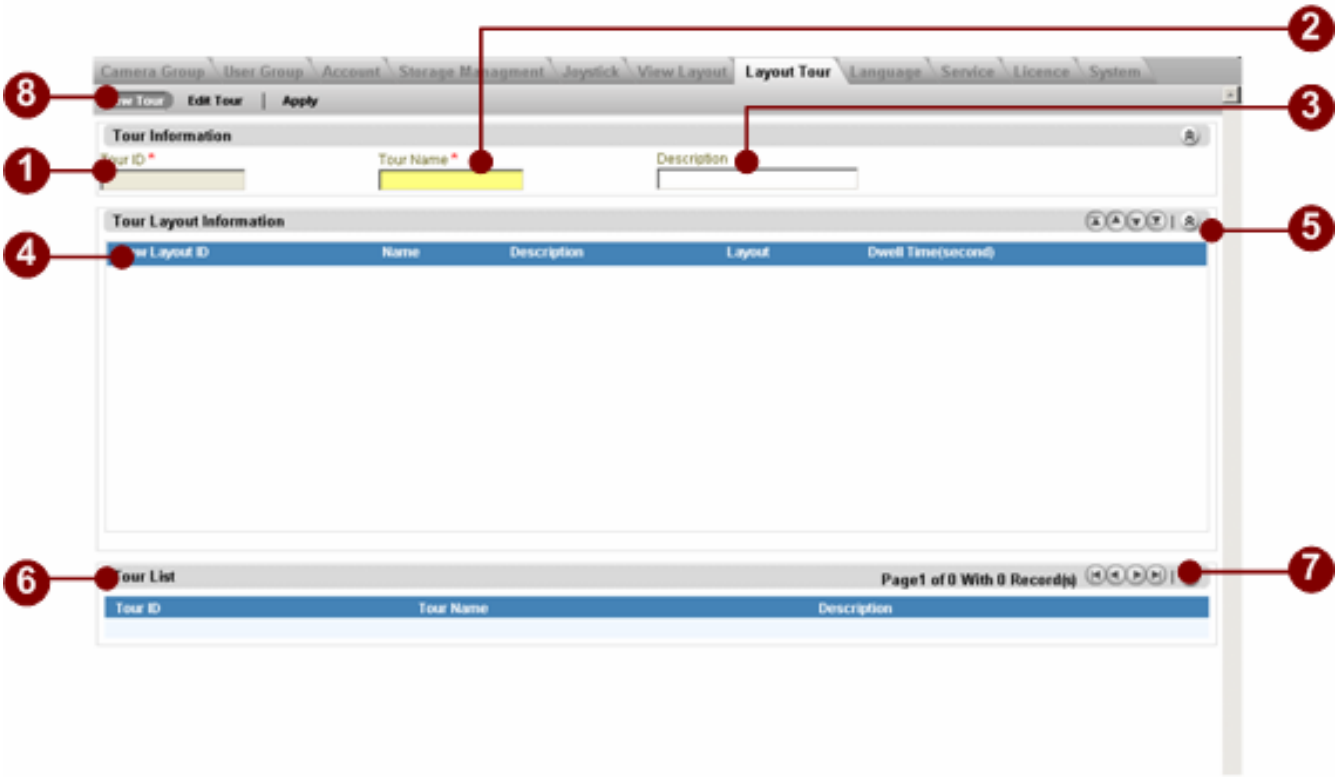


Figure 7-9 Add Layout Tour

1. **Tour ID**: Each layout tour has a unique view layout ID stored in the system. The column ID is assigned automatically by the system.
2. **Tour Name**: Enter the name of this layout tour.
3. **Description**: Enter the description of this layout tour.
4. **Tour Layout**: User can see all the existing view layouts selected in this layout tour. When a new layout tour is created, user needs to add view layouts.
5. **View Layout Sequence Control**: User can use it to move the sequence of the view layouts.
6. **Tour list**: User can see all the existing tour list here.
7. **Modify button**: Click these buttons to modify View Layout. It includes:

8. **New button**: Click this button to create a layout tour

9. **Edit button**: Click this button to edit the existing layout tour selected in the tour list. When user clicks the Edit button, then user will see the picture below.

10. **Apply button**: Click this button to save current settings

NOTE: User needs to edit a new layout tour to add view layouts.

Editing an existing tour

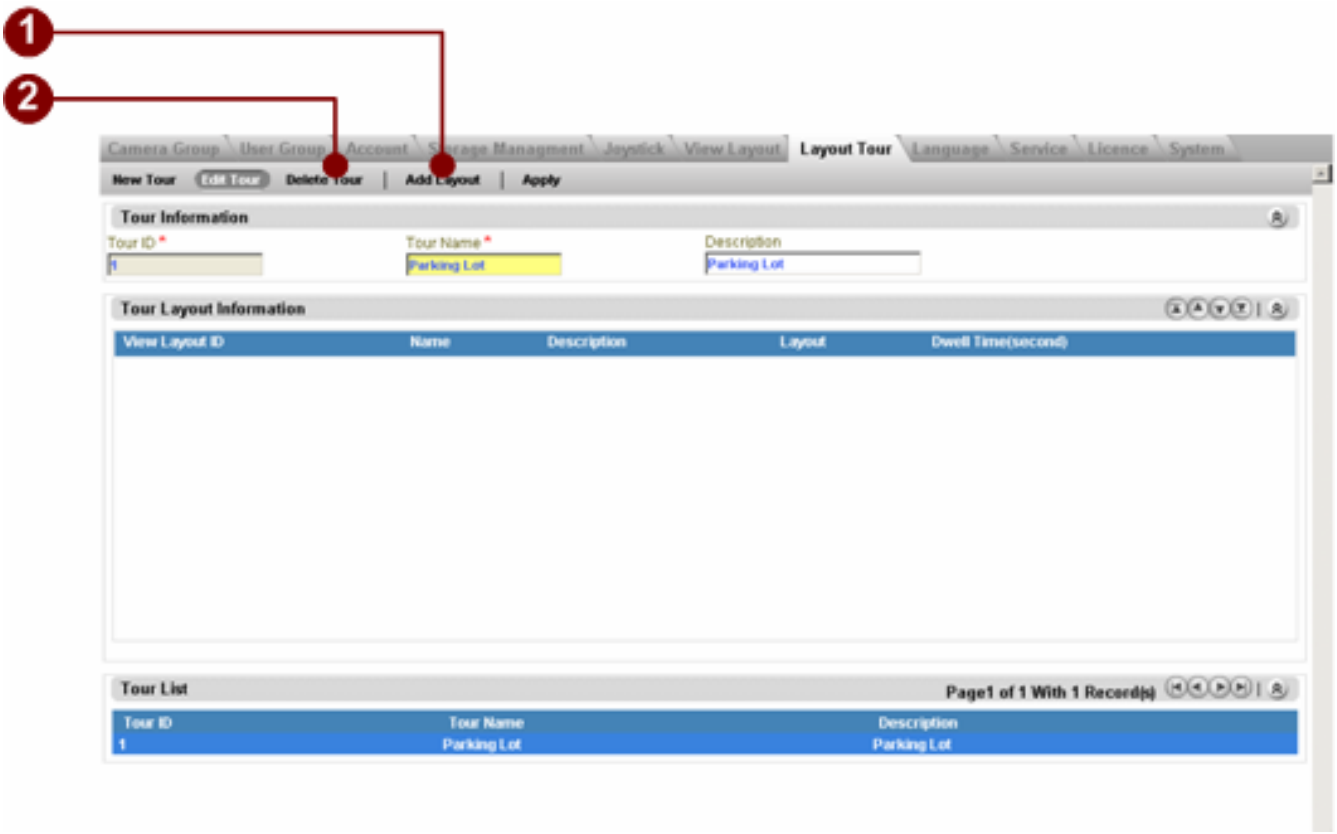


Figure 7-10 Edit Layout Tour

1. **Delete Tour**: Delete current tour
2. **Add layout**: Click this button to add View layouts to this layout tour. When clicking, user will see a pop-up window. Please select the view layouts user want to add. Then click apply.

Figure 7-11 Select Layout

1. **Layout Selection**: Selects pre-defined window layout
2. **Add Button**: Click Add button to add this pre-defined window layout into the Layout Tour

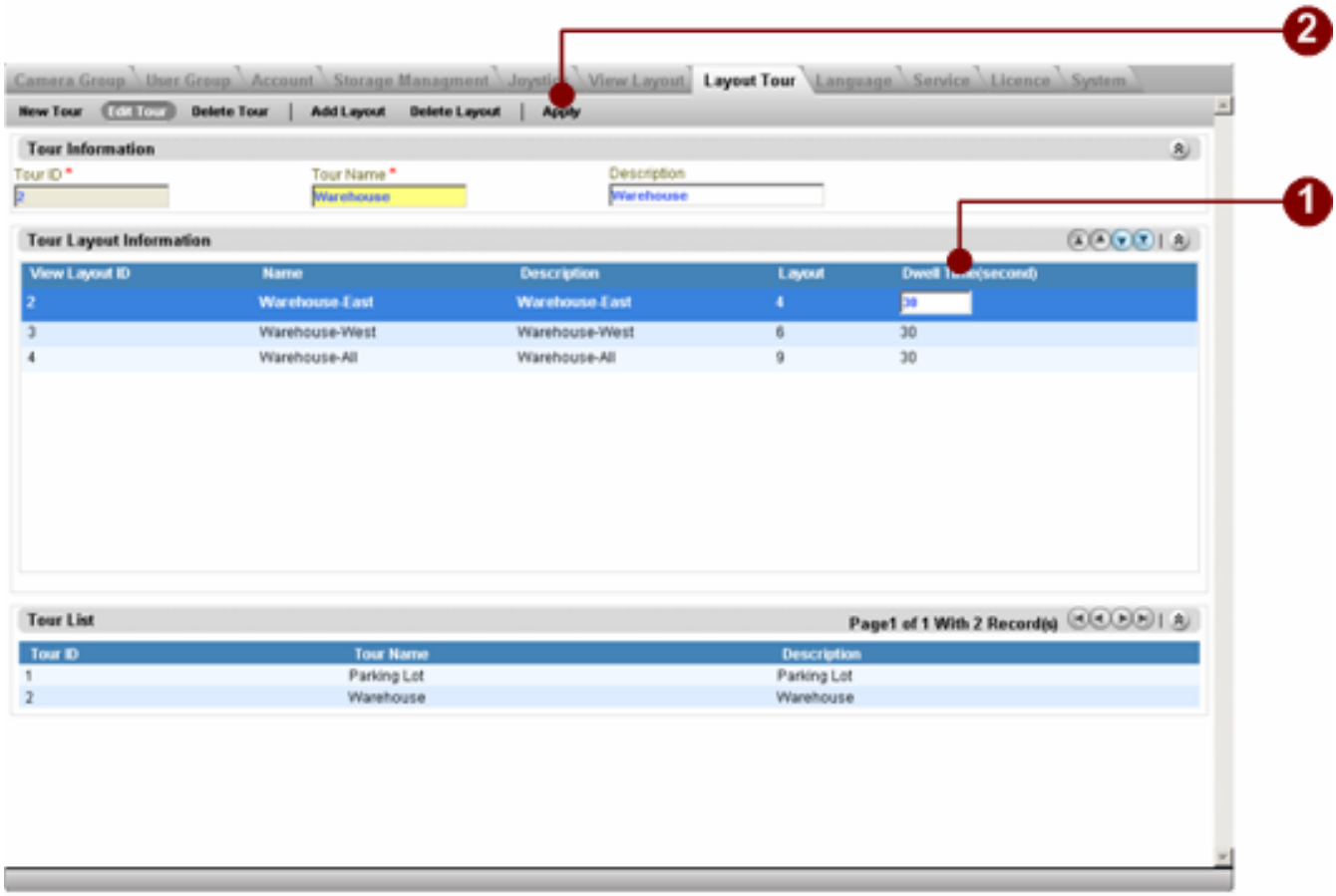


Figure 7-12 Edit Layout Tour

1. **View layout dwell time setup**: User can set the dwell time for system to keep a view layout. Just click the view layout and key in dwell time.
2. **Apply button**: Save all the settings before user exit. Otherwise, the settings will be gone.

NOTE: Default Dwell time is 30 seconds. Please don't set this value to one that is smaller than 15 seconds.

Language

This sections teaches user to select language.

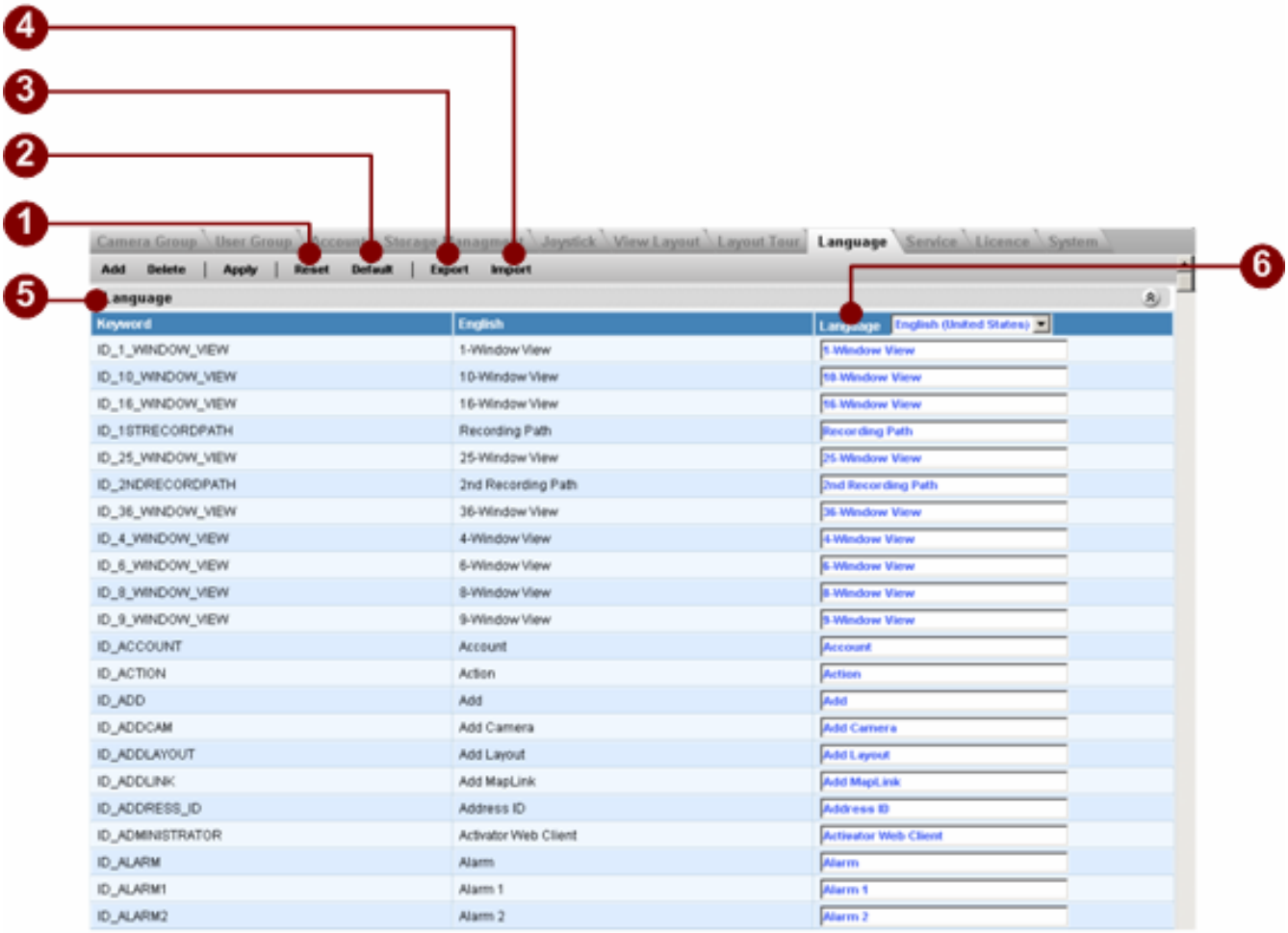


Figure 7-13 Language

1. **Reset to setting before apply**: Reset and the input will be cleared
2. **Restore to Default Setting**: Restore the input fields back to default settings
3. **Export Language setting to File**: Export current language to a **Export_<LANGUAGE_CODE>.XML** file. This file locates at the same directory of ACTi NVR. There is also a **ExportFormat.XSL** file, user may edit the language translation by double clicking on the XML file
4. **Import Language setting from file**: Import the translated XML file
5. **Language**: By clicking this button, user may add/remove the supported language set
6. **Select Language to Translate**: Select preferred language to translate.

Service

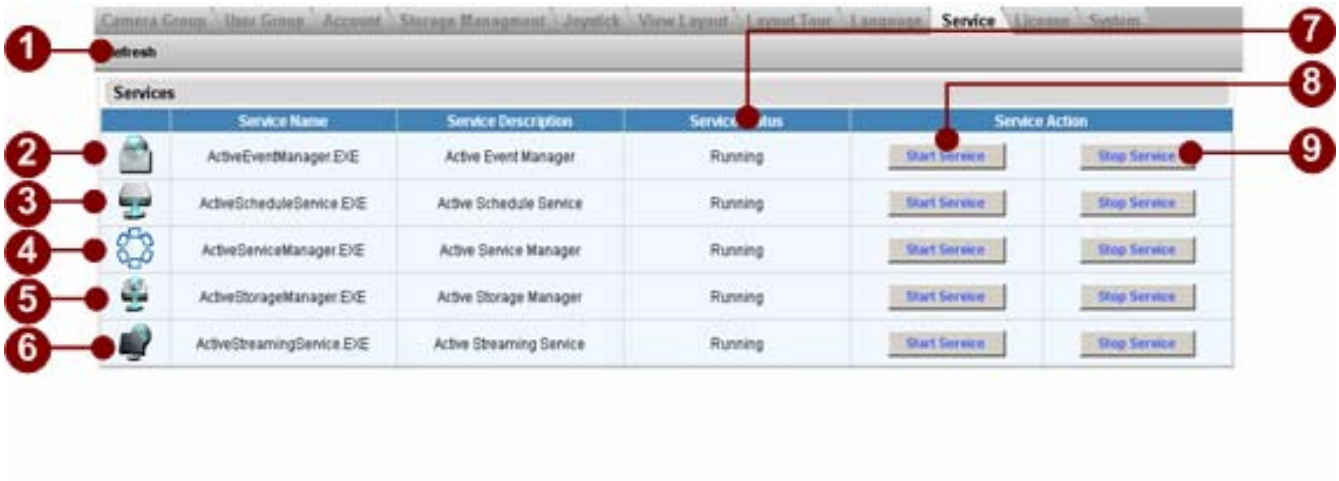


Figure 7-14 Service

1. **Refresh**: Click this icon will refresh the status of each service
2. **ActiveEventManager.EXE**: Event manager handles events in background mode
3. **ActiveScheduleService.EXE**: Scheduler handles scheduled events
4. **ActiveServiceManager.EXE**: Service manager runs as a watchdog in background mode. When other services failed, Service Manager will try to start the service again
5. **ActiveStorageManager.EXE**: Storage manager handles capacity and hard disk spaces
6. **ActiveStreamingService.EXE**: Streaming service manages client connections to streaming engine to devices
7. **Service Status**: Displays service status, they are **Running, Pending, Stop**.
8. **Start Service**: Starts service
9. **Stop Service**: Stops service

IMPORTANT: For security reason, this operation can only be executed in NVR Workstation running on the same machine where NVR Server is installed. This operation is disabled under NVR Web Client and NVR Workstation running on another machine.

License

This section describes the license management under ACTi NVR. Please refer to ACTi Sales Representative if you encountered any issues.

Registration By License Key

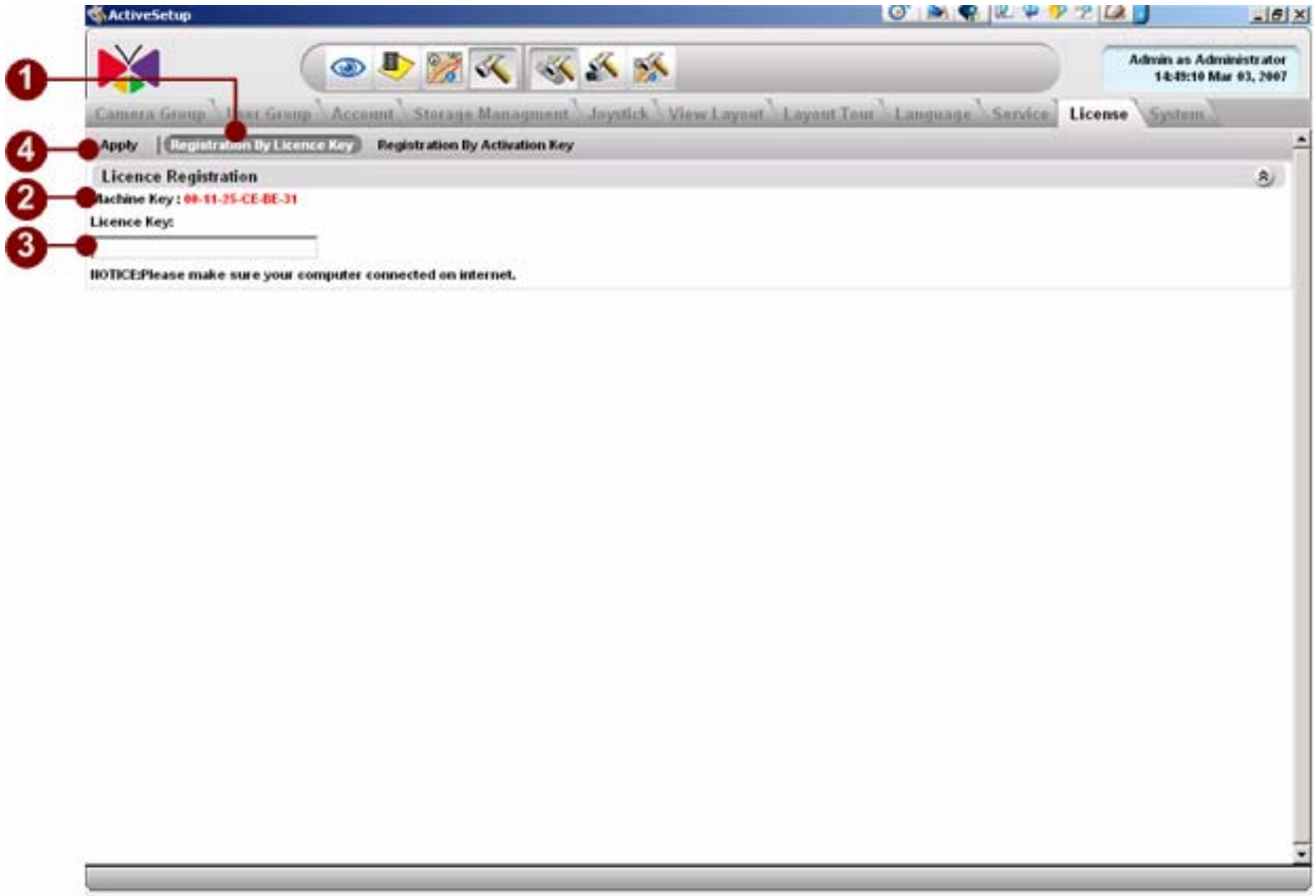


Figure 7-15 Register by License Key

1. **Registration By License Key**: Click this button to register by license key
2. **Machine Key**: MAC Address of the machine running ACTi NVR Server. Note that, if there are more than one MAC Address in the machine, only the MAC address with smallest number will be applied.
3. **License Key**: Input License Key provided by ACTi
4. **Apply**: Click Apply to register the license key to ACTi NVR System

IMPORTANT: When using this mechanism to register the license key, ACTi NVR Server will connects to Register Server on Internet. Please make sure the machine installing license key has the permission and Internet connection.

Registration By Activation Key

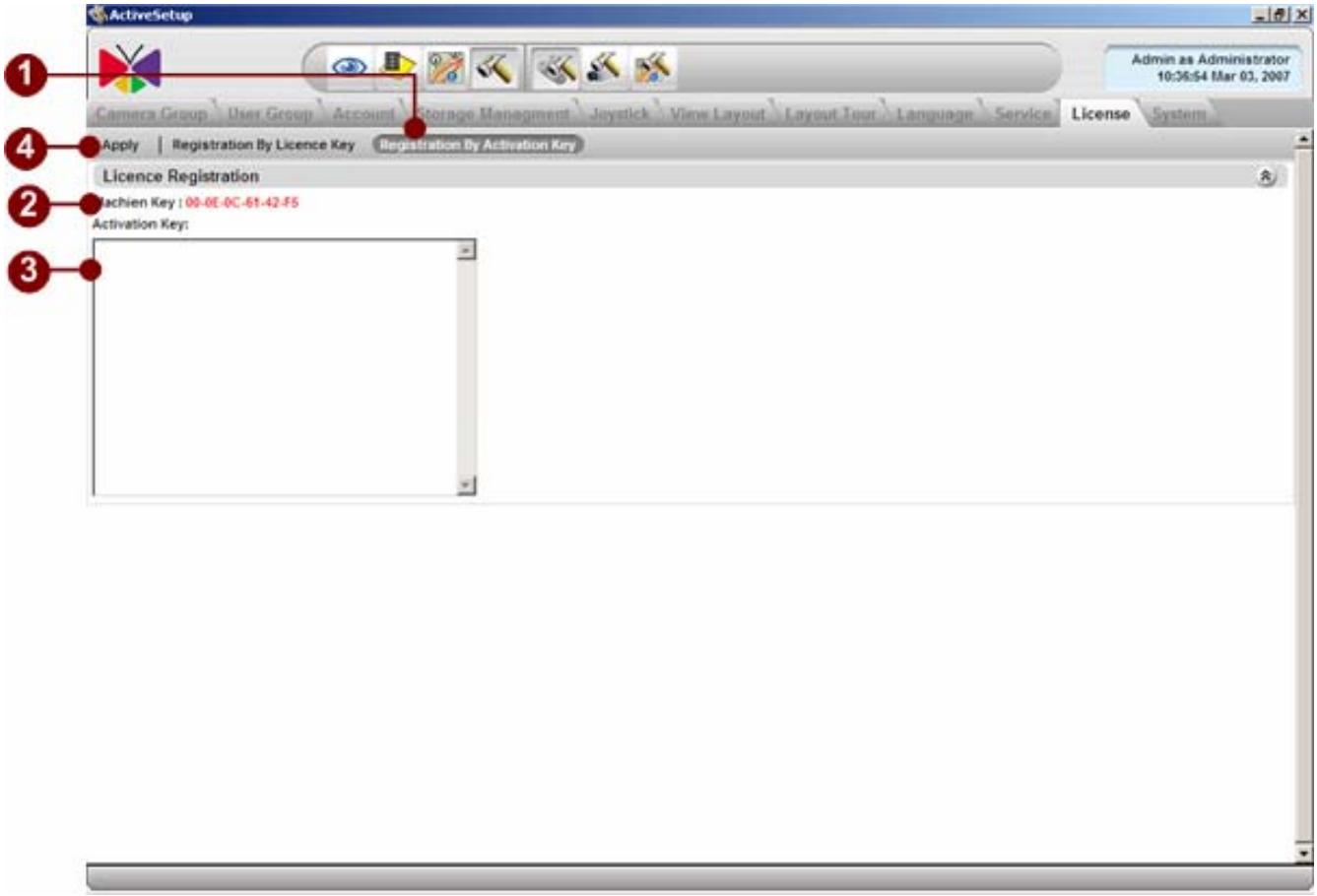


Figure 7-16 Register by Activation Key

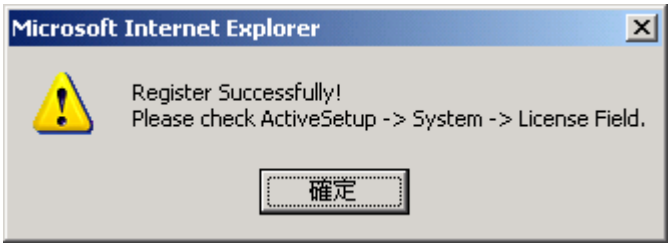
1. **Registration By Activation Key**: Click this button to register by Activation key
2. **Machine Key**: MAC Address of the machine running ACTi NVR Server. Note that, if there are more than one MAC Address in the machine, only the MAC address with smallest number will be applied.
3. **Activation Key**: Input Activation Key provided by ACTi. You can simply copy the Activation key and paste it here
4. **Apply**: Click Apply to register the license key to ACTi NVR System. The registration status will be displayed

IMPORTANT: When using this mechanism to register the activation key, user need to provide the MAC address of the machine running ACTi NVR Server and the License Key. You can go to ACTi's web site to register yourself

IMPORTANT: If there are more than one Machine Key (MAC Address) in the machine, only the smallest one will be applied. Please make sure that you provide this Machine Key along with License to ACTi Sales Representative to get the Activation Key.

License Registration Messages

1. **Register Successfully**: Register successfully.



2 **License Key Format not correct**: Go check the license key format. Make sure the "-" dash are entered in the license key

3 **Connection error to Registration Center**: Please make sure the Internet connection and connection to Registration Center is valid.

Microsoft Internet Explorer
Connection error to Registration Center!
Please make sure the connection to the Registration Center is valid.
確定

4 **Bad License Key or Activation Key**: Make sure the Activation key is correct

Microsoft Internet Explorer
Bad License Key or Activation Key.
Please make sure the Activation Key is correct. Please go to web site to register and get the Activation key again.
確定

5 Machine Key (MAC Address) not matched: Possible cause is the MAC address of the associated Activation is not valid. User might have registered the license key with other MAC address (or other PC) already

Microsoft Internet Explorer
Machine Key (MAC Address) not matched.
Please make sure the MAC Address registered is correct, or the license was registered by another MAC Address.
確定

IMPORTANT: If you still had troubles with license registration, please contact ACTi Sales Representative.

System

This section teaches user

1. Setup and see current system info
2. Setup E-mail / FTP accounts for system to send info to upon event.

The E-mail / FTP account will be used for sending events which are trigger by ActiveSetup in [Camera Setup].

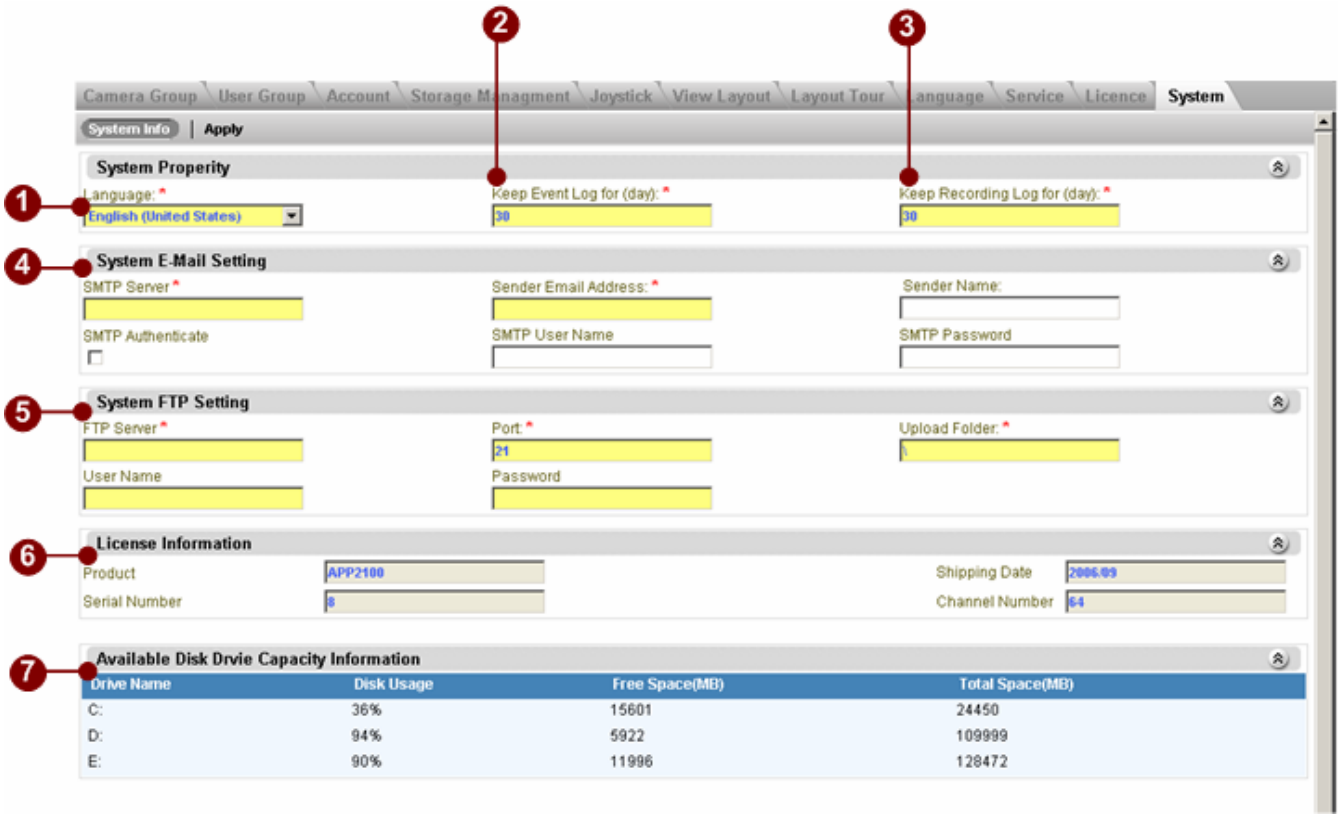


Figure 7-17 System Setup

1. **Language**: User can select a language for the ACTi NVR user interface.
2. **Keep Event Log for days**: Key in a period of time to keep the events on hard drive, after this period of time expires, the events will be deleted gradually and automatically.
3. **Keep Recording Log for days**: Key in a period of time to keep the logs on hard drive, after this period of time expires, the log will be deleted gradually and automatically.
4. **Email Setting section** : User can set an e-mail account for ACTi NVR to send notification when events are triggered. The E-mail account setting includes

   SMTP Server: Enter the SMTP server address for ACTi NVR to send E-mail.

   Sender E-mail Address: Enter the E-mail address for ACTi NVR to send E-mail.

   Sender Name: Enter a name for ACTi NVR to send E-mail.

SMTP authentication: Enable this checkbox if the SMTP server requires authentication.

SMTP user name: Enter a SMTP user account for ACTi NVR E-mail account.

SMTP password: Enter a password for SMTP user account.

5. **System FTP Setting** Section: This section includes a FTP account for ACTi NVR to send notification when events are triggered. The FTP account setting includes

   FTP Server: Enter a FTP server address for ACTi NVR to send E-mail.

   Port: Enter the port number for ACTi NVR to upload file to FTP.

   Upload folder: Enter the name folder path on the FTP server for ACTi NVR to upload file onto.

   User name: Enter the FTP user name of the ACTi NVR FTP account.

   Password: Enter the FTP user name of the ACTi NVR FTP password.

6. **License Information**: User can see the software license information.

   Product: User can see the product name of this software.

   Serial number: User can see the serial number of this software.

   Shipping date: User can see the shipping date of this software

   Channel number: User can see the channel capacity registered in this software.

7. **Available Disk List and Information**: User can see all hard drives and hard drivers' information on this PC.

Camera Setup

[Camera Setup] is the setup group that lets the user modify settings individual to each camera. It includes recording, alarm, PTZ, event handling and preview. It is highly recommended to setup [System Setup] before creating settings in [Camera Setup]. Many [Camera Setup] can't be finished without completing [System Setup].

Camera

This section will teach user:

1. how to add camera
2. how to configure the video / time setting
3. how to delete cameras

All settings go with an individual camera. User has to select a camera and start this settings.

Add camera

There are 3 ways to add a camera

1. **Manually input**
2. **Import from search result**
3. **Import from another ACTi NVR**

Manually input

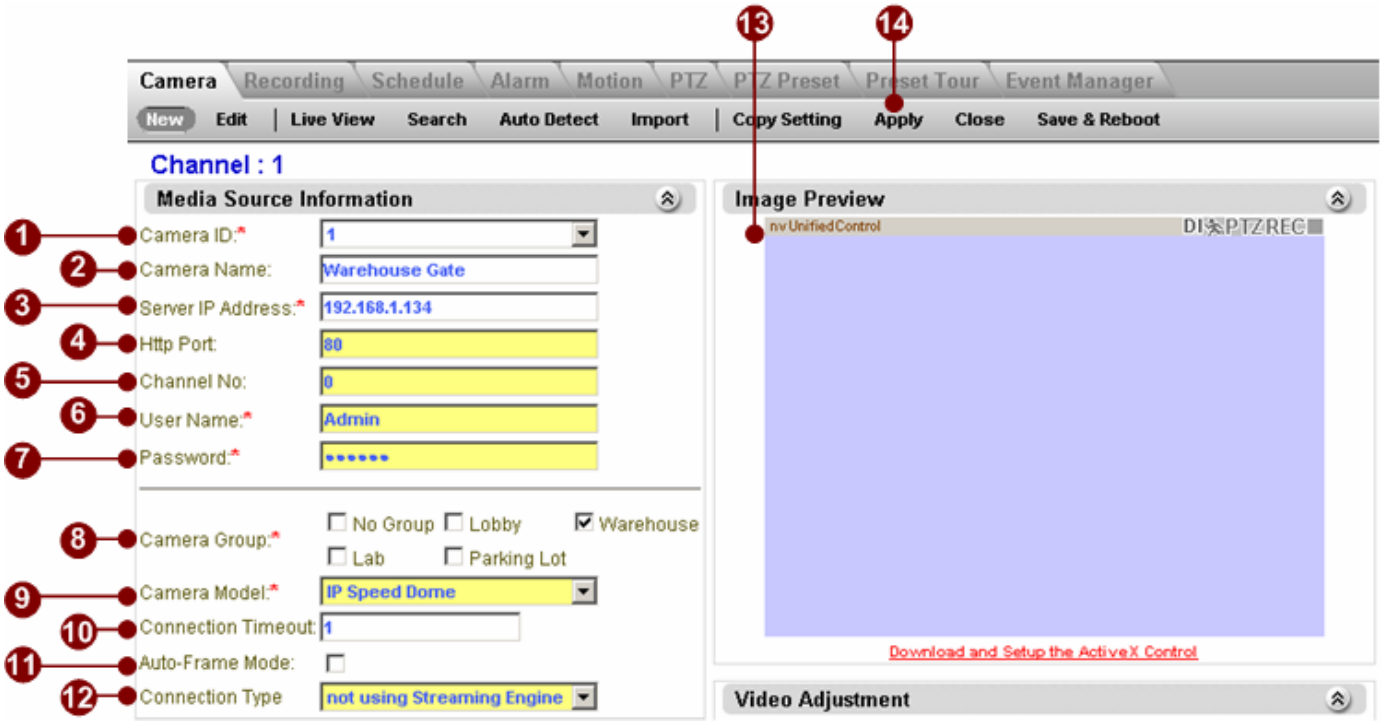


Figure 7-18 Camera Setup

1. **Camera ID**: Select a new camera ID to add a camera; or Select an existing camera ID to edit the camera setting..
2. **Camera Name**: Enter the name of the camera.
3. **Server IP Address**: Enter the IP address of the IP camera / video server.
4. **HTTP Port**: Enter the HTTP port for IP cameras/ video servers.
5. **Channel Number** (for Multi-channel video server only): Enter the channel number of the video server. If user is using IP camera or 1-channel video server, please enter 0 here.
6. **User Name**: Enter the user name to login the camera.
7. **Password**: Enter the password to login the camera.
8. **Select Camera Group**: Please add this camera to camera groups. User can add one camera to multi-camera groups at a time.
9. **Camera Model**: Select the device type of the IP cameras / video servers. **NOTE**: User must have the right setting here for many function to work. For example: The PTZ function will not work if user connects to an IP speed dome but selects the camera model to be IP camera. This is the same for Quad and devices with audio.
10. **Connection Timeout**: Enter a period of time (in second) for ACTi NVR to connect to this IP camera / video server. ACTi NVR will regard the device as not available if the device does not response in this period of time. We suggest user to set different values for different connection from the ACTi NVR to the IP camera

    LAN : 1 second

WAN : 1 second

11. **Auto Frame Mode**: Click this to enable auto frame mode. When in auto-frame mode, ACTi NVR will decrease the FPS when there are more than 4CHs previewing. This can be useful to decrease the CPU consumption.
12. **Connection Type**: This is the connection type between ACTi NVR and the IP camera / video server. Please refer to below info to select

    Connect via Streaming Engine: Please select this only if user connects to this IP camera via other ACTi NVR.

    Connect not via Streaming Engine (Default): Select this if user connects to this IP camera, enable this checkbox. When in auto-frame mode, ACTi NVR will decrease the FPS. when there are more than 4CHs previewing. This can be useful to decrease the CPU consumption.
13. **Live view** Button: When finish setting, click the Live view button to see if the video preview is ok. If yes, the connection setting is done. If not, please check again.
14. **Apply** button: Click the apply button to save the camera settings.

Import from search result

Figure 7-19 Search Button

15. **Search** button: Click this button to start searching all IP camera / video server on the same network segment. User can see the search window pop-up as below.

    NOTE: IP cameras / video servers not on the same network segment as the ACTi NVR can't be found by this search function.

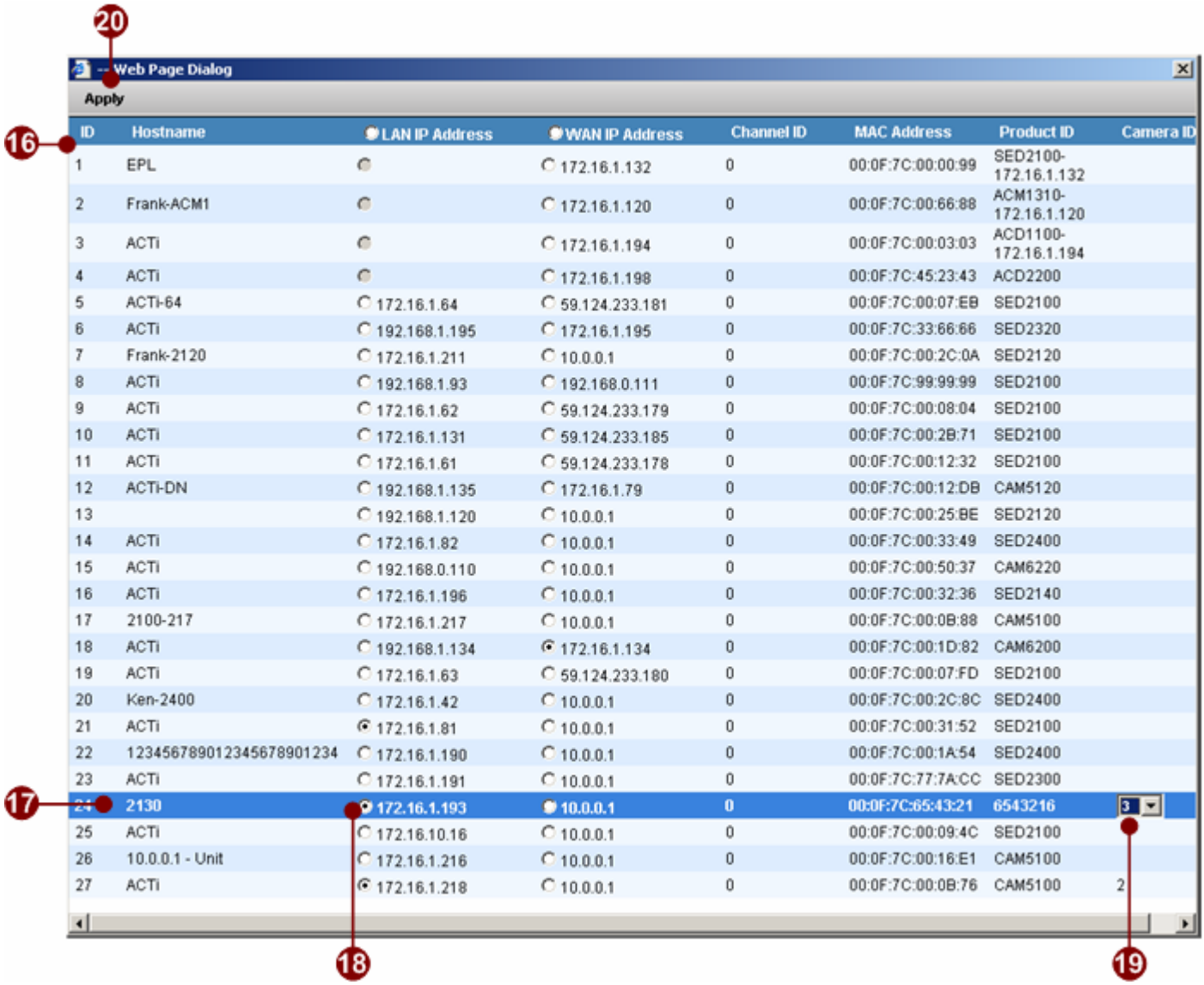


Figure 7-20 Search Camera

16. **Search List** : User can see the list of all the IP cameras / video servers found.
17. **Select Camera**: Click the row of the camera which user wants to add into this system.
18. **Select IP Address**: Select a camera with an IP address.
19. **Select an unused Camera ID** : Click to select an unused camera ID for this camera for ACTi NVR.
20. **Apply** button: After selecting all cameras which user wants to import, click this button to add.

Import from another ACTi NVR

Figure 7-21 Apply Button

21. **Import** button: Click this button, the import window will pop up as below. User can use the pop-up window which is able to import cameras from another ACTi NVR.

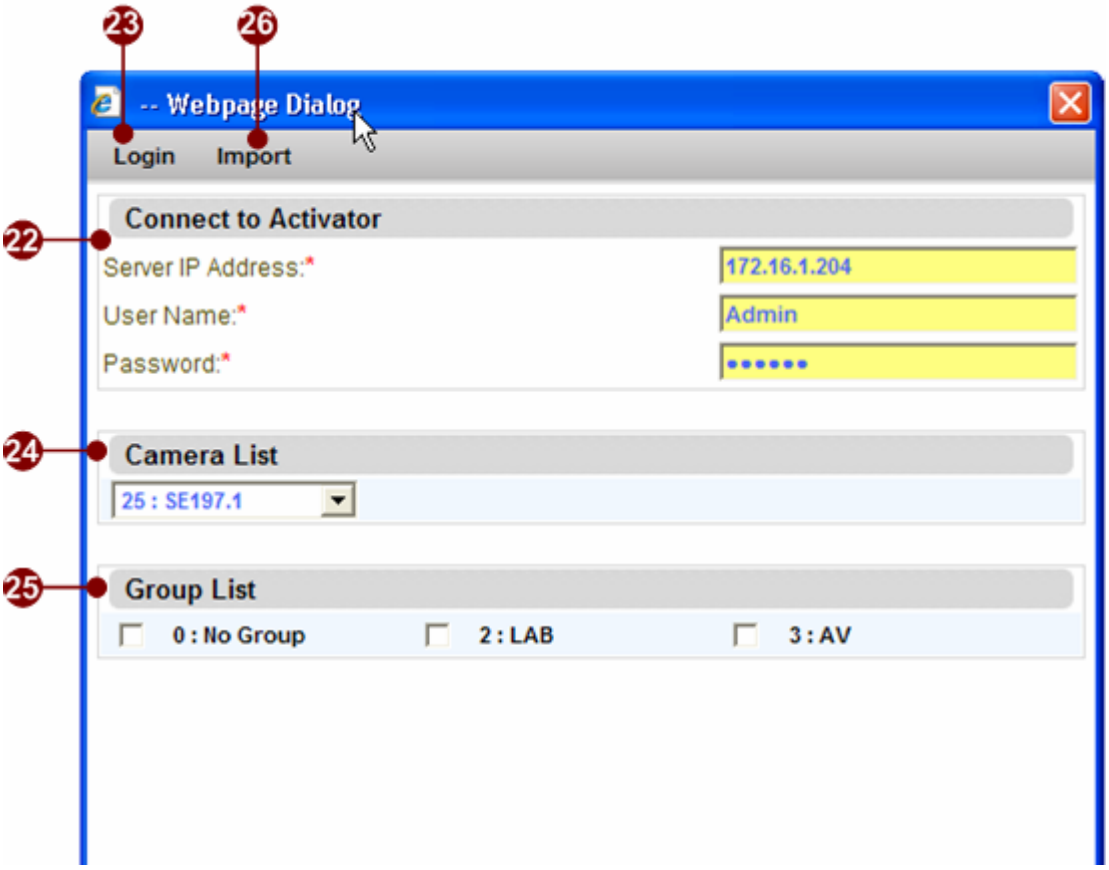


Figure 7-22 Apply Button

22. **Connect to ACTi NVR**: Enter the connection info for ACTi NVR to import camera setting from another ACTi NVR. The connection info includes

    - Server IP: The IP of another ACTi NVR.
    - User name: The user name to login another ACTi NVR.
    - Password: The password to login another ACTi NVR.

23. **Login** button: Click the login button to connect to another ACTi NVR. When connection is established, user will see info shown below in camera list and group list.
24. **Camera list** : This shows the cameras which are able to be imported from another ACTi NVR. User can import any cameras.
25. **Group list** : This shows the groups which are able to be imported from another ACTi NVR. User can import any groups.
26. **Import** button: Click this button to import all selected cameras and groups from another ACTi NVR.

Setup the video / time settings

This section teaches user how to setup the video / time settings on cameras. Before configuring this section, user has to set preview setting correctly, otherwise, this configuration will not work.

Figure 7-23 Auto Detect

27. **Auto detect** button: Click this button to search all current available IP camera / video server's video and Time settings. These information will be shown on the panel below.

Connection information

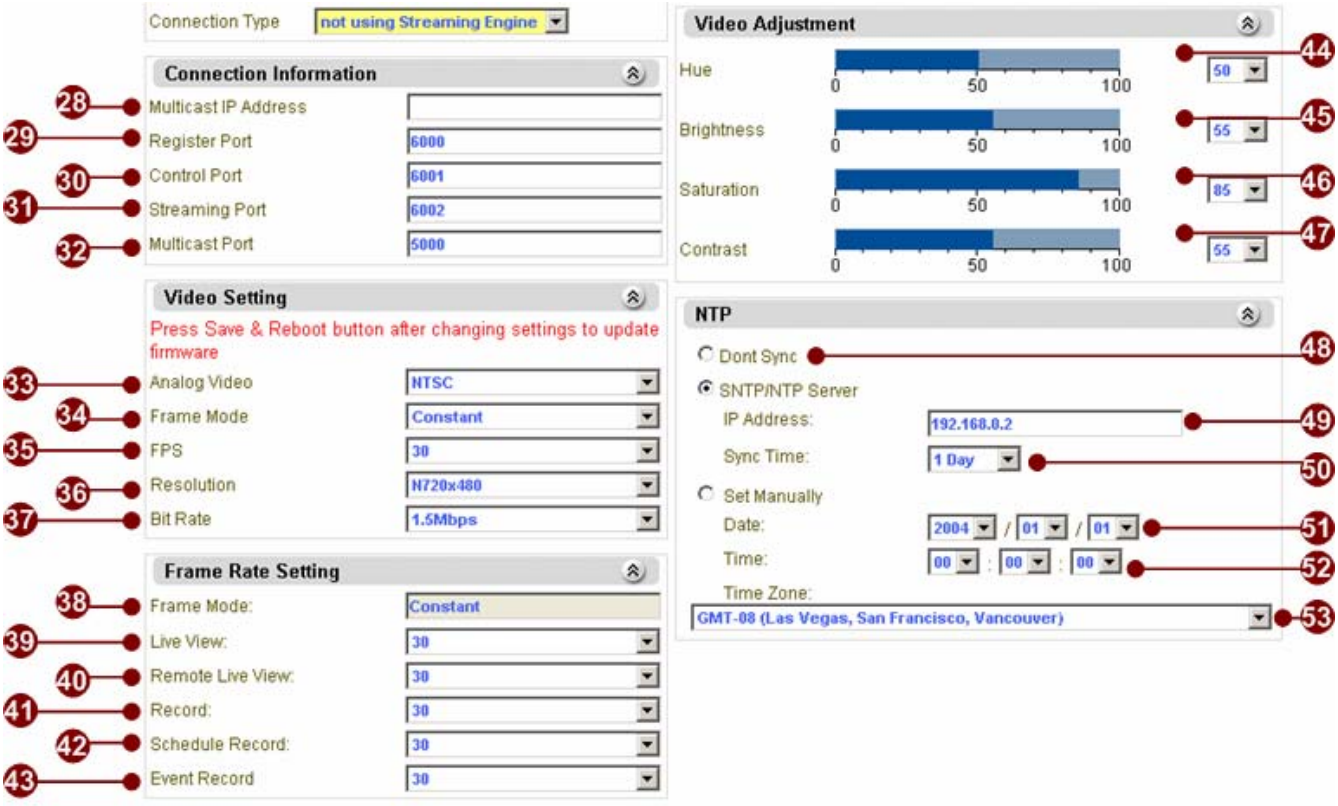


Figure 7-24 Auto Detect

28. **Multicast IP Address**: User can see the current multicast IP on this IP camera here. To modify it, enter the new one and click the Apply button.

29. **Register Port**: User can see the current register port on this IP camera here. To modify it, enter the new one and click the Apply button.
30. **Control Port**: User can see the current control port on this IP camera here. To modify it, enter the new one and click the Apply button.
31. **Streaming Port**: User can see the current Streaming port on this IP camera here. To modify it, enter the new one and click the Apply button.
32. **Multicast Port**: User can see the current multicast port on this IP camera here. To modify it, enter the new one and click the Apply button.

Video Setting

33. **Analog Video**: User can see the analog video type on this IP camera here. To modify it, select the right one and click the Apply button.
34. **Frame Mode**: User can see the Frame mode on this IP camera here. To modify it, enter the new one and click the Apply button.
35. **FPS**: User can see the FPS (Frames Per Second) on this IP camera here. To modify it, enter the new one and click the Apply button.
36. **Resolution**: User can see the Resolution on this IP camera here. To modify it, enter desired resolution and click the Apply button.
37 **Bit Rate**: User can see the Bit Rate on this IP camera. To modify it, enter the new one and click the Apply button.

Frame rate setting

38. **Frame Mode(Read Only)** : User can see the Frame mode here.
39. **Live View Frame Rate**: Select frame rate for live preview.
40. **Remote Live View Frame Rate**: Select frame rate for remote live preview.
41. **Record Frame Rate**: Select frame rate for recording.
42. **Schedule Record Frame Rate**: Select frame rate for schedule recording..
43. **Event Record Frame Rate**: Select frame rate for event recording.

Video Adjustment

44. **Video Hue Setting**: User can see the current hue setting or adjust it by selecting the parameter.
45. **Video Brightness Setting**: User can see the current hue setting or adjust it by selecting the parameter.

46. **Video Saturation Setting**: User can see the current hue setting or adjust it by selecting the parameter.

47. **Video Contrast Setting**: User can see the current hue setting or adjust it by selecting the parameter.

NTP settings

48. **Do not Sync.**: When this checkbox is enable, the IP camera / video server will synchronize with its internal clock instead of a NTP server.

49. **SNTP/NTP Server:** When this checkbox is enable, the IP camera / video server will synchronize its time with a NTP server according to your setting.

    - SNTP / NTP server IP address: Enter the NTP server IP address for the camera to synchronize with.

50: **Sync. Time interval**: Enter the time interval for IP camera / video server to synchronize its time with a NTP server.

51. **Manually setup Time :**When this checkbox is enable, IP camera / video server will use its internal clock and will not sync with any SNTP/NTP server.

    Date: Set the current date.

52. **Time**: Set current time.

53. **Time Zone**: Set a time zone.

IMPORTANT: User need to press **Save & Reboot** to restart the device to make NTP settings effective

Copy settings from another Camera Setting

Figure 7-25 Copy Setting

54. **Apply** button: Click this button to save current settings.

55. **Copy Setting** button: This function saves a lot of time. User can configure one IP camera / video server and duplicate its own settings to other cameras.

Delete Camera

This section teaches user how to delete a camera. There are several options to delete a cameras, please see below for more information. User has to select a camera first and click the Edit button. The camera delete window will pop up.

Figure 7-26 Delete Camera

1. **Delete** options : Select the delete options of this camera. Below are a table telling the difference between one another.
2. **Delete** button: Click this button to delete.
   Cancel button Click this button to cancel the delete option.

Deletion Options

Option	*Camera Setting*	*All Setting*	*Log Records*	*All Files*
Delete only camera setting	Deleted	Remain	Remain	Remain
Delete all configuration setting	Deleted	Deleted	Remain	Remain
Delete all log records	Deleted	Deleted	Deleted	Remain
Delete All Files	Deleted	Deleted	Deleted	Deleted

Recording

This section teaches user how to configure the recording on each camera.

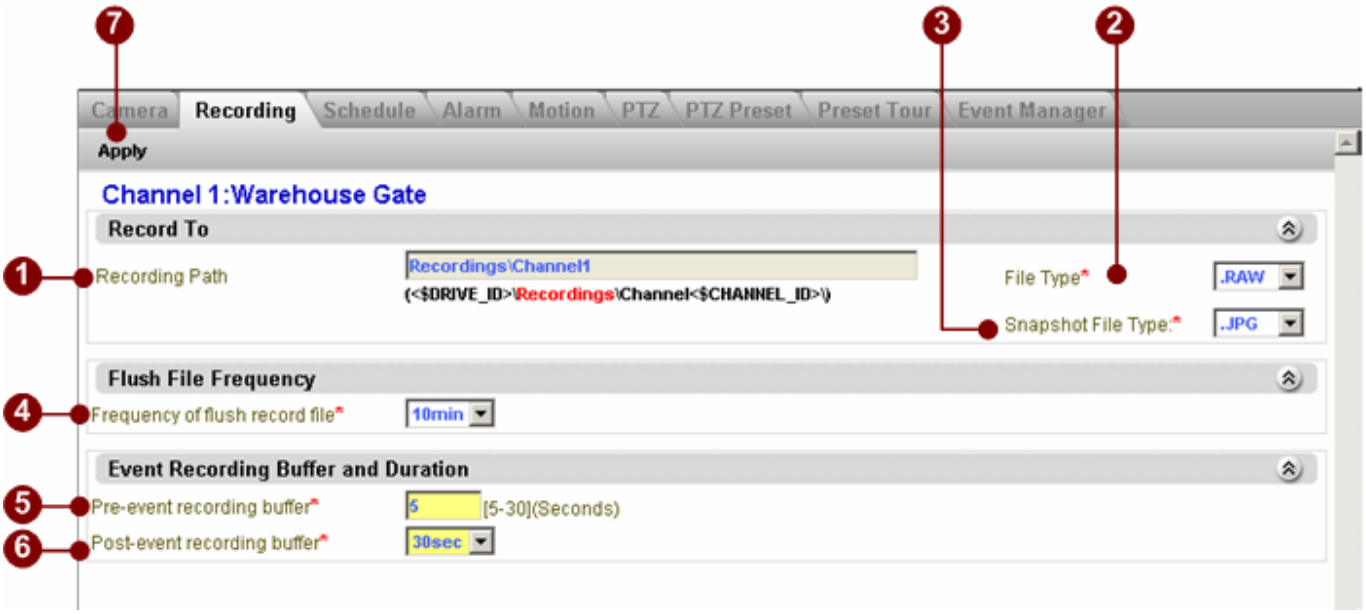


Figure 7-27 Recording Setup

1. **Recording Setup**: This is the path where all recordings are stored. This is only readable, user cannot do any change on it. This can only be changed in [System Setup]
2. **Recording File Type**: Please select the file type which user wants the recording to be. Currently ACTi NVR only supports .RAW format.
3. **Snapshot File Type**: Please select the file type which user wants the Snapshot files to be Currently, ACTi NVR supports .JPG and .BMP.
4. **Frequency of flush record file**: Please select the a period of time for recording each file.
5. **Pre-event recording buffer**: Please select the pre-event recording buffer for this camera.
6. **Post-event recording buffer**: Please select the post-event recording buffer for this camera.
7. **Apply** button: Click this button to save the settings.

File Type

Value	*Type*	*Description*
.RAW	.raw	ACTi raw format recording file.
.AVI	.avi	DivX encoded avi file.

Snapshot File Type

Value	*Type*	*Description*
.JPG	.jpg	JPG format image file.
.BMP	.bmp	BMP format image file.

Schedule

This section teaches user how to configure the recording schedule on the IP camera. The recording schedule is set by

1. Weekly Schedule: All recording will be done and repeated weekly.
2. Special day: User can set a special schedule for special days. This schedule will overrule user's previous weekly setting.

Also, there are 4 types of schedules available for choose. Please see below for details.

View By Channel

This section teaches user how to configure week-recording schedule. User has to select recording type for 24 hours a day, from Sunday to Saturday.

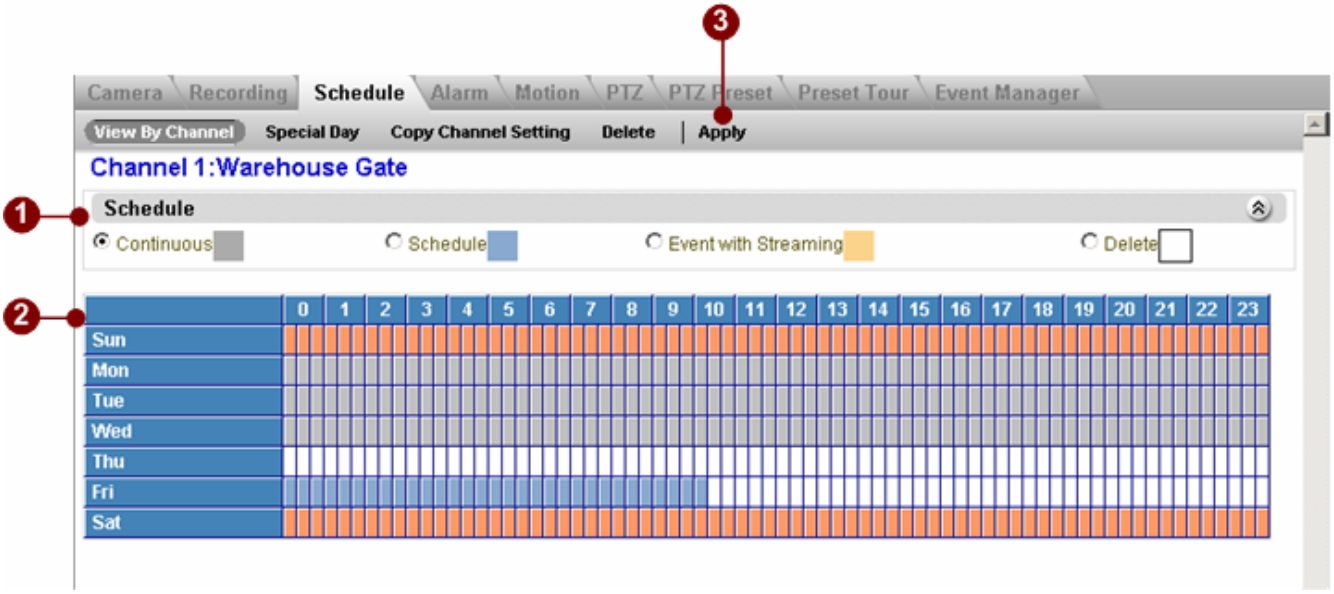


Figure 7-28 Setup by channel

1. **Schedule Type**: User can select the schedule type to apply to the weekly schedule table below. There are 4 schedule types including
   - Continuous: The camera will record continuously for an entire day.
   - Schedule: The camera will record continuously at the time which user wants.
   - Event with Streaming: The camera will record if events are triggered.
   - Delete: The camera will not record and there will be no streaming from the IP camera.
2. **Weekly schedule**: After select schedule type, user can apply it to the weekly table here.
3. **Apply** button: Click this button to save the settings.

Schedule Type

Value	*Type*	*Description*
Continuous	**Continuous**	Continuous recording for all day
Schedule	**Schedule**	Only record selected day
Event with Streaming	**Streaming**	Record stream when event trigger
Delete	**Delete**	Delete selected schedule setting

Special Day

On special days, user can apply a different schedule to overrule other weekly schedule. This can be very useful to manage the recording on special days.

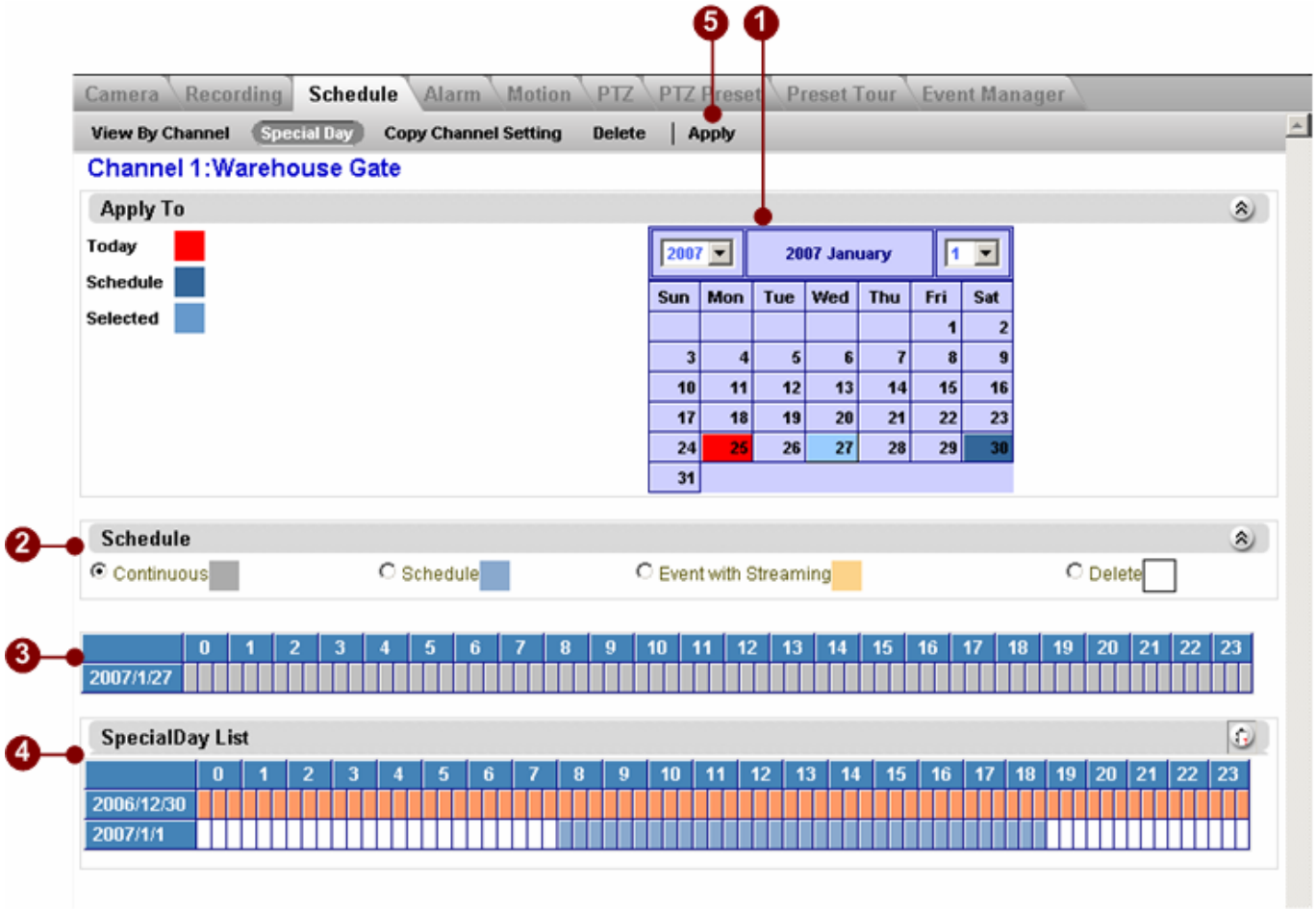


Figure 7-29 Setup By Special Day

1. **Schedule Calendar**: User can use it to set special days to Special day schedule.
2. **Schedule Type**: User can select the schedule type to apply to the weekly schedule table below. There are 4 schedule types including.
   - Continuous: The camera will record continuously for an entire day.
   - Schedule: The camera will record continuously at the time which user wants.
   - Event with Streaming: The camera will record when events are triggered.
   - Delete: The camera will record and there will be no streaming from the IP camera.
3. **Special Day schedule**: User can select the recording schedule for this camera on this special day.
4. **Special Days List**: User can see all existing special day schedules here.
5. **Apply** button: Click this button to save the settings.

Alarm

This section teaches user how to configure the alarm description of the camera alarm 1 and alarm 2. It will be very easy for guard to recognize the alarm type in the future.

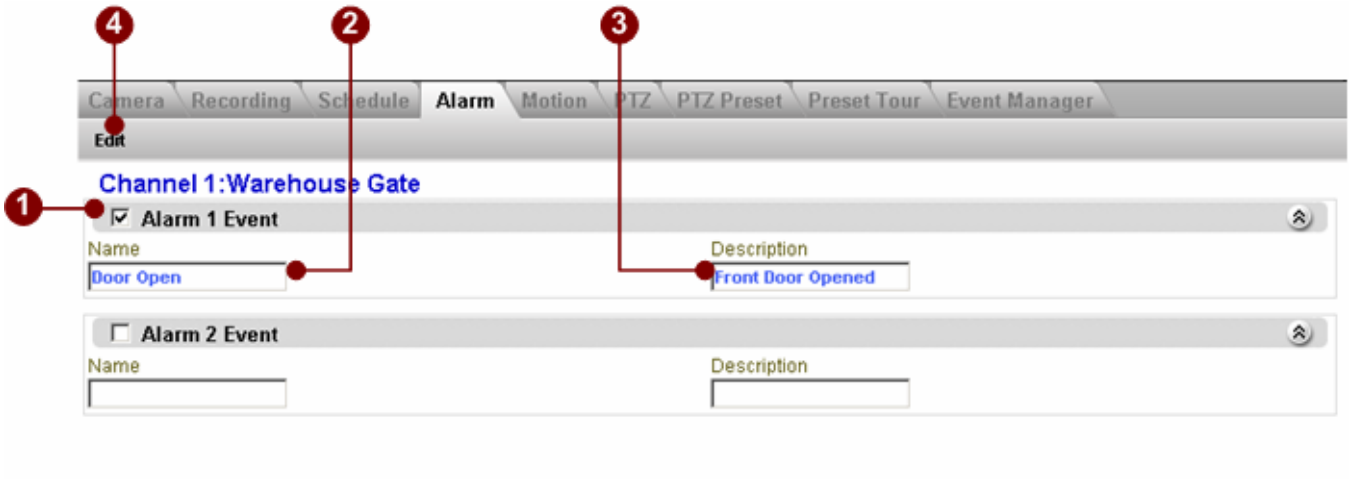


Figure 7-30 Alarm

1. **Alarm Enable/Disable**: Click this button to enable/disable the alarm 1 event of this camera. All the actions (recording, taking snapshots) will be triggered by alarm 1 when alarm 1 is enabled.
2. **Name**: Enter the name of this alarm. It will be easy for guard to recognize in the future:
3. **Description**: Enter the description of this alarm.
4. **Edit** button: Click this button to save the settings.

Motion

This section teaches user how to configure the motion detection of this camera. Before configuring the motion detection, user needs to connect to the IP camera / video server to get server settings.

NOTE: Pleas make sure current machine IP address is on the same network segment as the IP camera or video server.

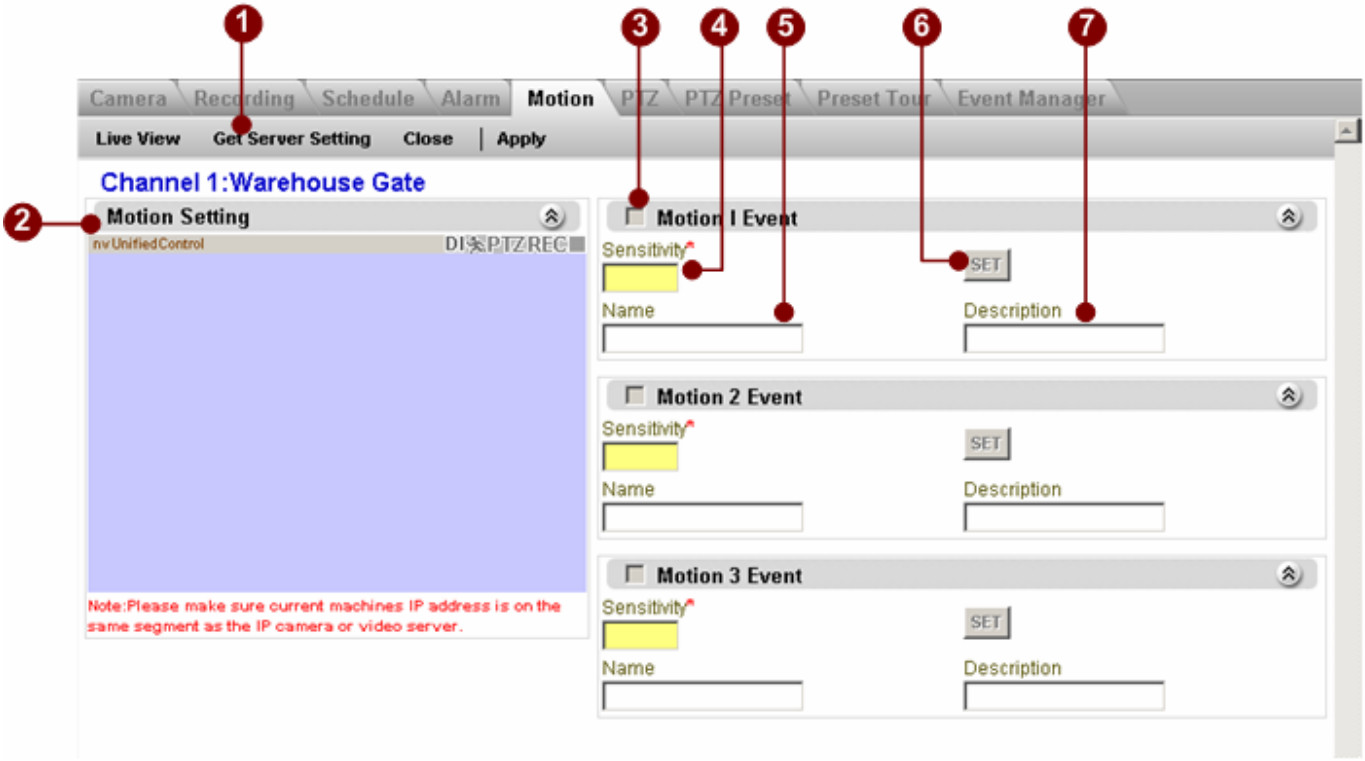


Figure 7-31 Motion

1. **Get Sever setting**: Click this button to connect to the IP camera / video server to preview images and get current motion detection settings.
2. **Live view window**: User can see the live preview here and to set the motion detection area.
3. **Enable / Disable Motion Detect**: Click this button to enable / disable this motion detection area.
4. **Sensitivity**: Enter the sensitivity level of this motion detection area.
5. **Set Sensitivity**: Click this button after user enters the sensitivity level of this motion detection area, and the sensitivity will be saved to IP camera / video server.
6. **Name**: Enter the name of this motion detection area.
7. **Description**: Enter the description of this motion detection area.
8. **Apply button**: Click this button to save the settings
9. **Close button**: Click this button to stop previewing current camera in live preview window.

NOTE: Range of sensitivity is 0~100.

PTZ

This section teaches user how to set the PTZ (Pan/Tilt/Zoom) actions of this IP camera/video server. This PTZ

NOTE: Pleas make sure current machine IP address is on the same network segment as the IP camera or video server.

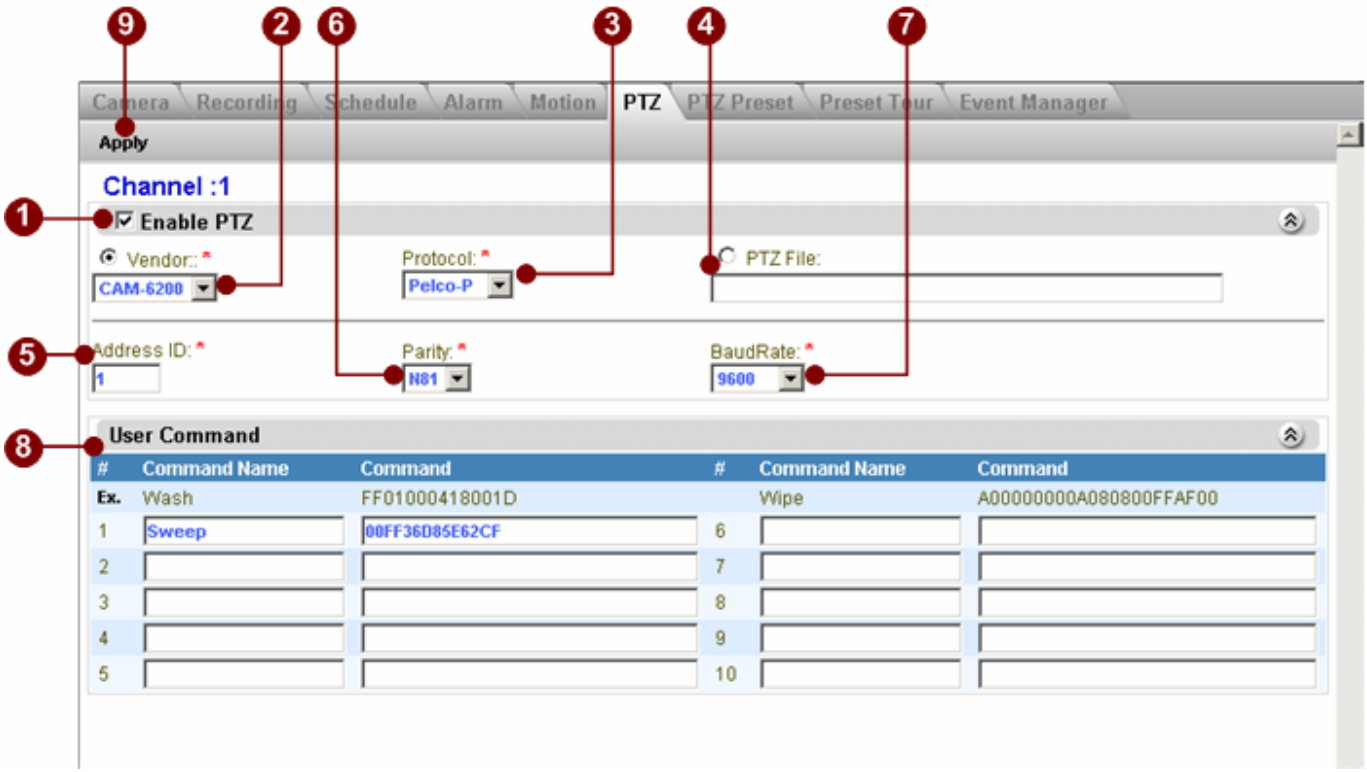


Figure 7-32 PTZ Setup

1. **Enable/Disable PTZ**: Click this to enable or disable the PTZ function of this IP camera / video server.
2. **Vendor**: Select the vendor of the speed dome userwish to control.
3. **Protocol**: Select the protocol of the speed dome.
4. **PTZ File**: If your speed dome's protocol is not integrated by ACTi NVR, user can import a new protocol file. For details about the protocol file format, please contact our technical support.
5. **Address ID**: Enter the address ID of the speed dome.
6. **Parity**: Enter the parity of the speed dome.
7. **Baud Rate**: Enter the baud rate of the speed dome.
8. **User Command List**: If your speed dome or PTZ device has a special function not supported in the standard protocol. Ex: Activate the wiper to clean the window of the PTZ. User can

manually input the command to activate the wiper for later selectable in PTZ controls.

9. **Apply** button: Click this button to save the settings

PTZ Preset

This section teaches user how to set the preset points, auto scan and the OSD settings of the camera. Some functions might not work if the protocol or your speed dome doesn't support this function.

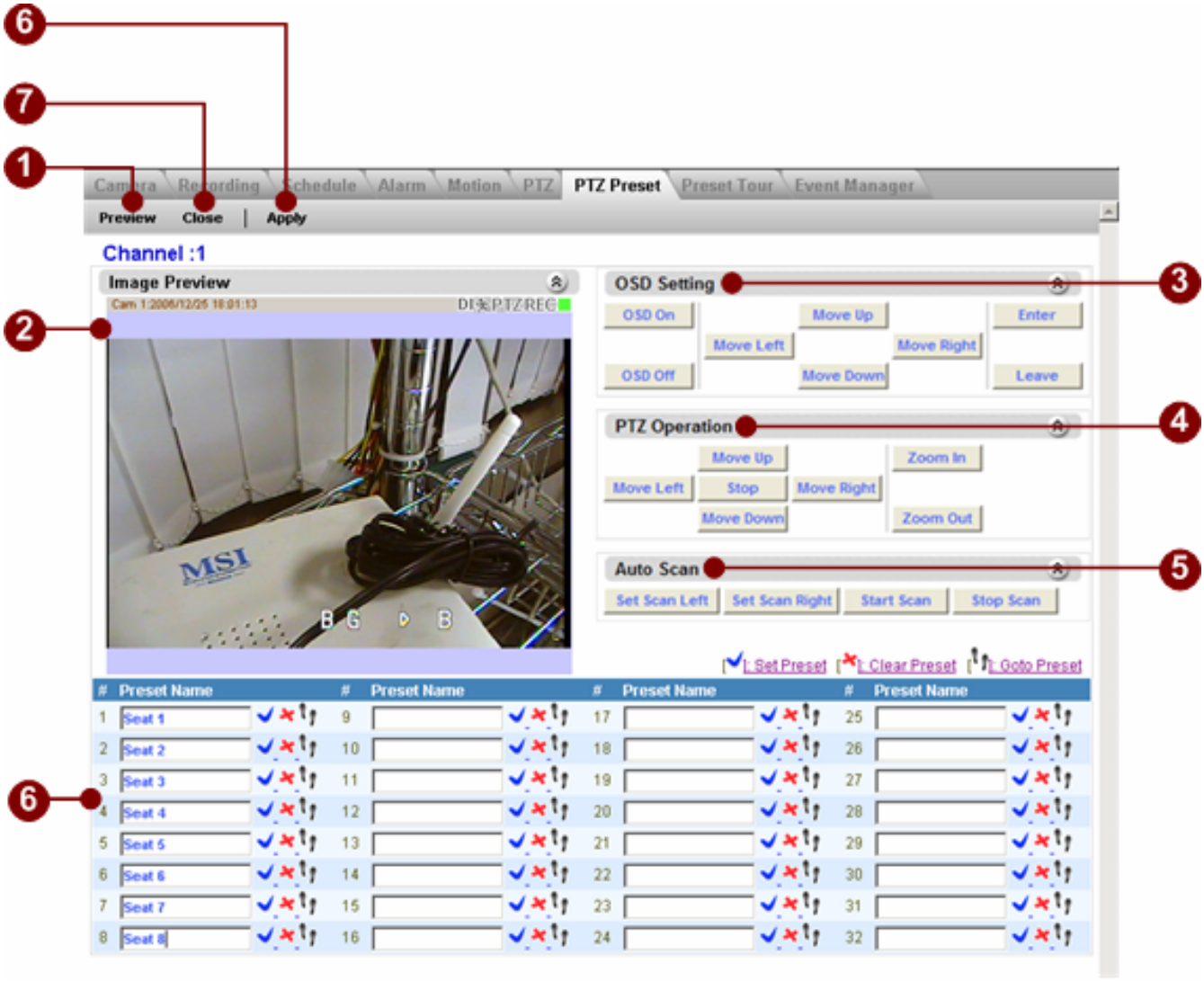


Figure 7-33 PTZ Preset

1. **Preview Button**: Click this button to start to preview the camera.
2. **Preview Screen**: User can see the camera preview here.
3. **OSD Setting Control Panel** : In this panel, user can open the camera OSD and setup OSD settings.
4. **Auto Scan Control Panel** : In this panel, user can setup the auto scans of this speed dome.
5. **Preset Control Panel** : In this panel user can setup preset points, enter preset names, go to preset points and delete preset points.

6. **Apply** button: Click this button to save the settings
7. **Close** button: Click this button to stop previewing current camera in live preview window

IMPORTANT: CAM-6200 series only supports up to 30 preset positions. Make sure you don't set preset position 31 and 32.

IMPORTANT: Under Auto Scan function, the direction and position of Scan Left and Scan Right is from IP Speed Dome's point of view.

Preset Tour

In previous section of [PTZ Preset], user can set preset points. In this section, user can let system to tell speed dome to go to selected preset points in programmable order and dwell at each preset points for programmable time.

NOTE: the previous section [PTZ Presets] must be setup first before user can select them into preset tour in this section.

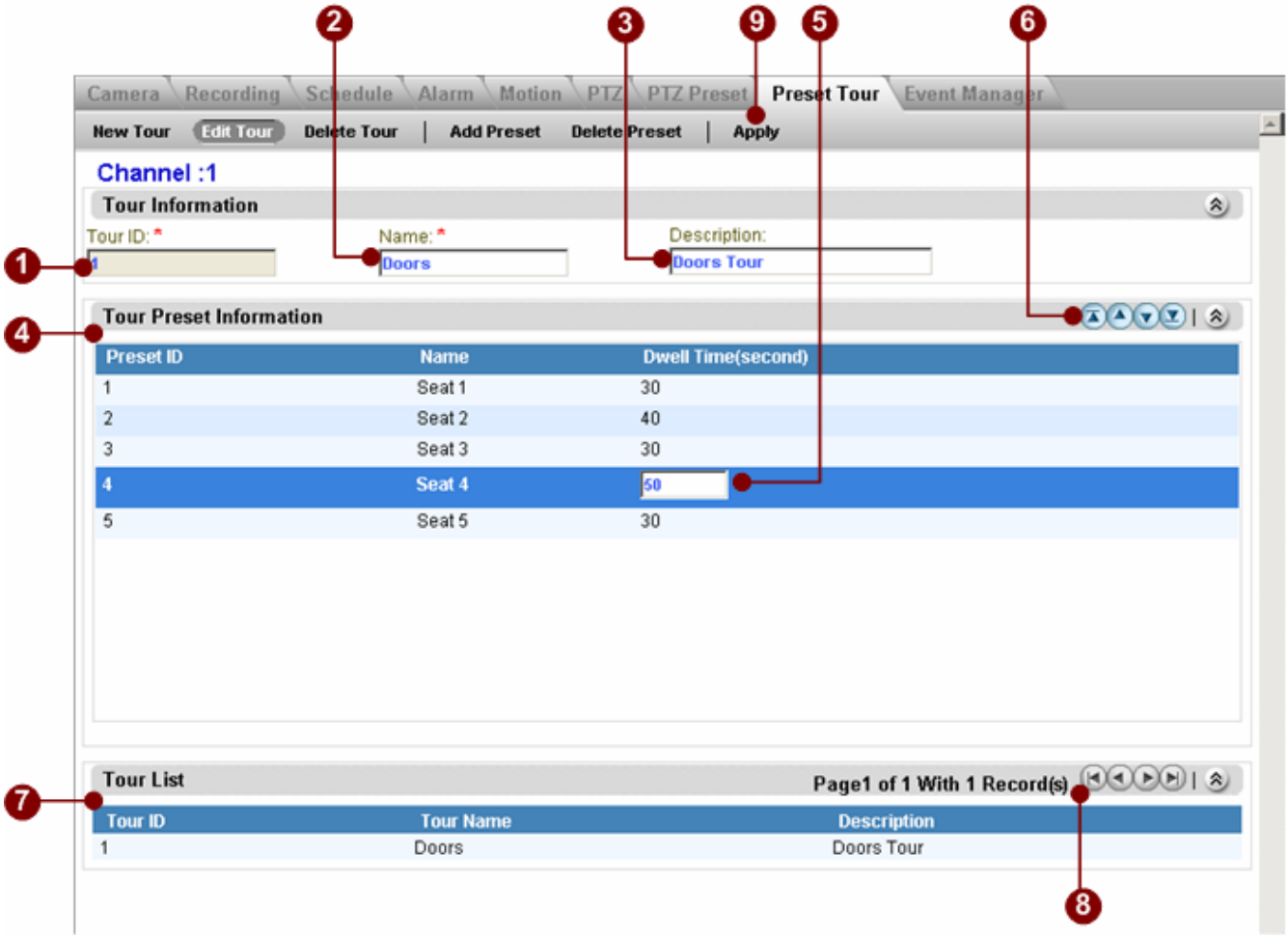


Figure 7-34 Preset Tour

1. **Tour ID**: Each preset tour has an unique preset tour ID stored in the system. The ID column is entered automatically by the system
2. **Name**: Enter the name of this preset tour
3. **Description**: Enter the description of this preset tour
4. **Preset List**: User can see all current preset list here.
5. **Preset Dwell Time** Setting: Setup the dwell time of each preset points
6. **Preset Sequence Control Panel**: User can use it to move the sequence of the view layouts

7. **Tour List**: User can see all the existing tours here.
8. **Control Panel of Tour list**: User can use this panel to switch between pages of tour list.
9. **Apply** button: Click this button to save the settings

NOTE: Default Dwell time is 30 seconds. Please don't set this value to one that is smaller than 15 seconds.

Event Manager

Event manger is for ACTi NVR to take actions when there's an event. Example: ACTi NVR can start to record images when the motion detection of the camera is triggered. To setup event manager, user needs to

1. First: Define the event that triggers event action
2. Second: Setup the event actions taken when there is an event.

Event type

This section lets user selects which event will trigger event actions. Also user can select what event action to take when there's an event.

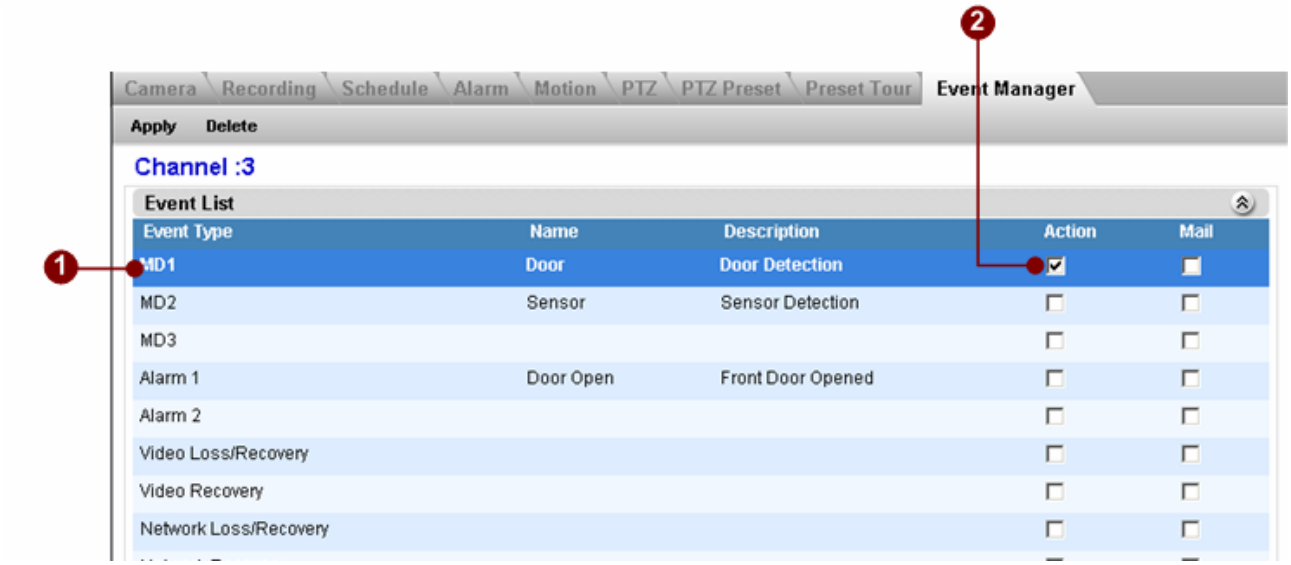


Figure 7-35 Action Setup

1. **Event type**: User can see the list of event type here.
2. **Enable Action**: Click to select which action to take upon such

Event Actions

This section lets user selects which action to take upon event.

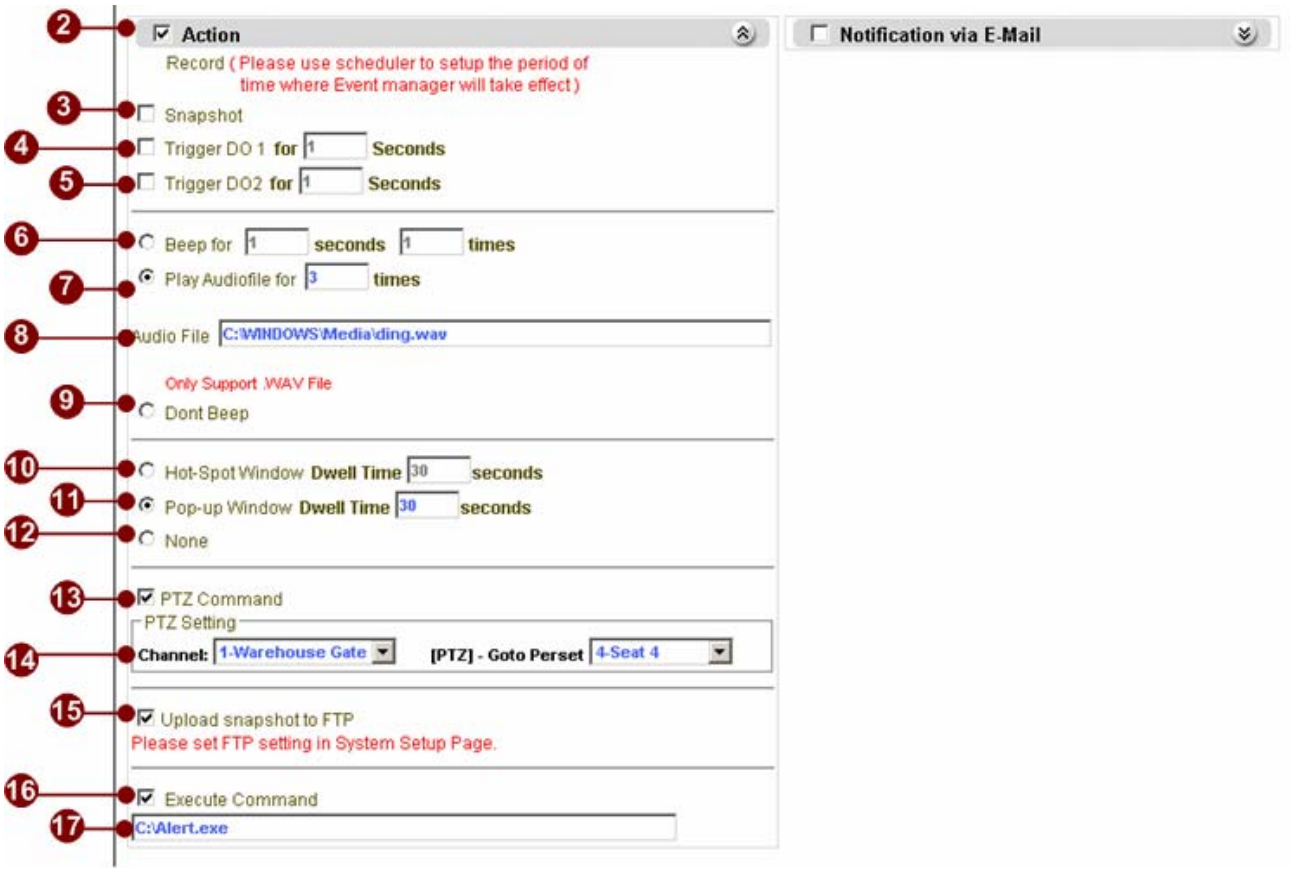

Action
Notification via E-Mail
Record (Please use scheduler to setup the period of time where Event manager will take effect)
Snapshot
Trigger DO 1 for 1 Seconds
Trigger DO2 for 1 Seconds
Beep for 1 seconds 1 times
Play Audiofile for 3 times
Audio File C:\WINDOWS\Media\ding.wav
Only Support .WAV File
Dont Beep
Hot-Spot Window Dwell Time 30 seconds
Pop-up Window Dwell Time 30 seconds
None
PTZ Command
PTZ Setting
Channel: 1-Warehouse Gate
[PTZ] - Goto Perset 4-Seat 4
Upload snapshot to FTP
Please set FTP setting in System Setup Page.
Execute Command
C:\Alert.exe

Figure 7-36 Action Setup

2. **Action Selection**: Toggle Action selection.
3. **Snapshot**: Click to enable / disable Snapshot when this event occur
4. **Trigger DO1**: Click to enable / disable DO1 when this event occur and enter the period of the DO1 to be triggered..
5. **Trigger DO2**: Click to enable / disable DO1 when this event occur and enter the period of the DO2 to be triggered..
6. **Beep**: Click to enable / disable ACTi NVR to Beep upon event. User can also select how many times does it beep and the duration of each beep.
7. **Play Audio File**: Click to enable / disable ACTi NVR to play your desired audio file for programmable times.
8. **Audio File Path**: Enter the path of the audio file to be played.
9. **Don't beep**: Click to disable beep function of ACTi NVR.
10. **Activate Hot-Spot Window**: Click to enable / disable the video of the camera to be displayed on Hot-Spot window upon event. Also, user can select the duration for video to be displayed on the Hot-spot window.

11. **Activate Pop-Up Window**: Click to enable / disable the video of the camera to be displayed on a Pop-out window upon event. Also, user can select the duration for video to be displayed on the Hot-spot window.
12. **None**: Click to disable active Pop-up window and Hot-Spot window.
13. **Enable PTZ Command**: Upon event, ACTi NVR can move specific camera to specific presets. Click this to enable this function.
14. **Camera Channel and Preset number**: Select which camera and which camera presets to go to.
15. **Upload Snapshot File to FTP Site:** Click to enable ACTi NVR to upload FTP to a FTP site upon this event.
16. **Enable Command** : Click to enable ACTi NVR to execute a certain command upon this event. This is a very power function. User can use it to integrate ACTi NVR's event handling with other programs.
17. **Command File Path**: Enter the path of the command to be executed upon event.

IMPORTANT: Options in channel and preset are set in PTZ setting.

Mail Notification Setup

This section lets user setup the E-mail notification.

Figure 7-37 Mail Notification Setup

1. **Notification via E-Mail**: Toggle selection to send notification via mail or not
2. **E-mail receiver**: Click to select which user for ACTi NVR to send E-mail notification upon this event. All these E-mail accounts are from the user of the ACTi NVR.
3. **Mail Subject**: Click to select the Mail subject upon event.
4. **Mail Message**: Click to select the message of the E-mail upon event.
5. **Attach Snapshot File** : Click to select whether to send Snapshot in the E-mail upon event.

IMPORTANT: Attach Snapshot option can be enabled when Action and Snapshot are selected

Map Setup

This chapter teaches user how to configure the E-maps to be displayed in the ActiveMAP program. Active MAP is a very user friendly interface for guards to easily control surveillance areas.

Map Manager

This section tells user how to setup a e-MAP. E-map's setting is based on camera groups. Only cameras within the same camera group can be displayed on the same E-map.
Before user starts to edit the E-map, be sure to select a camera group first.

Add a New Map

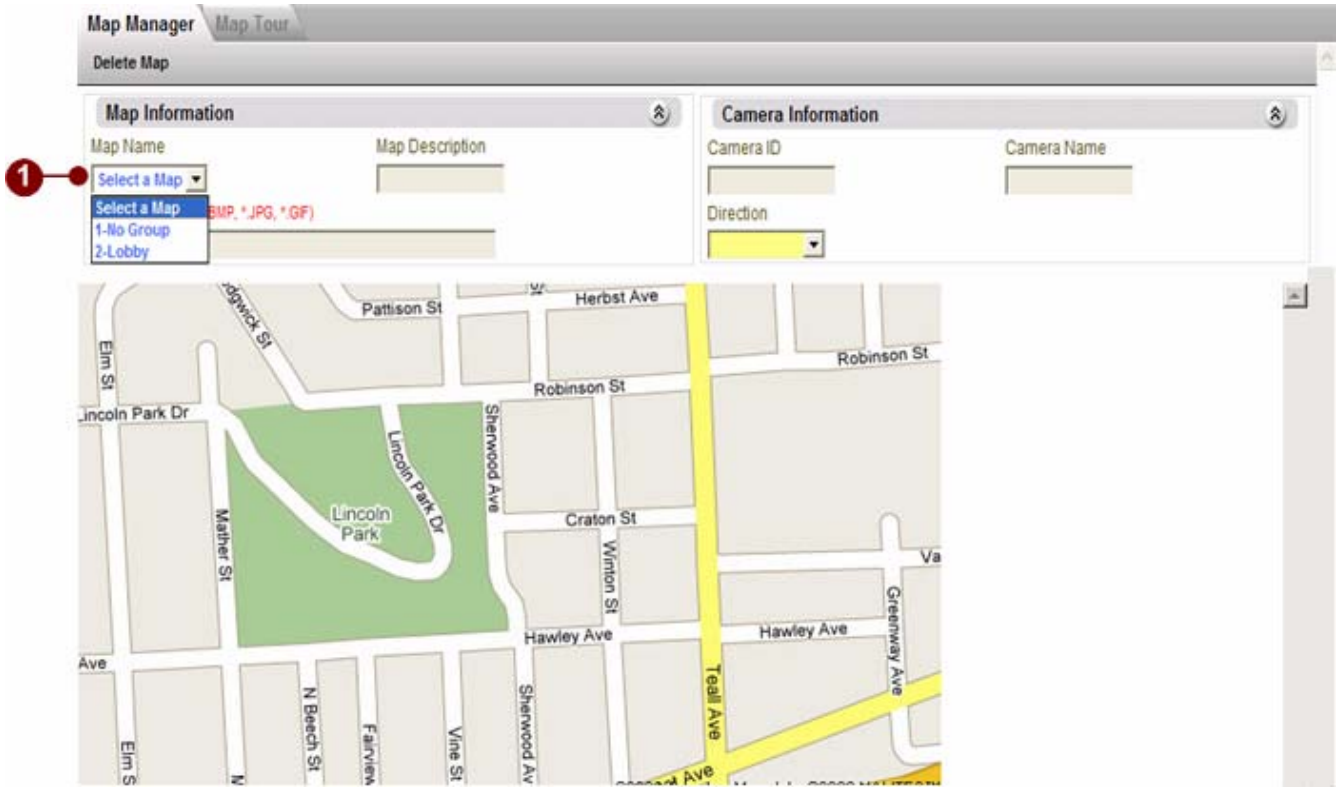


Figure 7-38 Add a new Map

1. **Map Name**: By clicking the Map Name, it displays a list of valid Camera Group.

IMPORTANT: Each Map maps to one Camera Group. In other word, the number of camera group is the same as the number of Map

Add Camera / Delete Camera

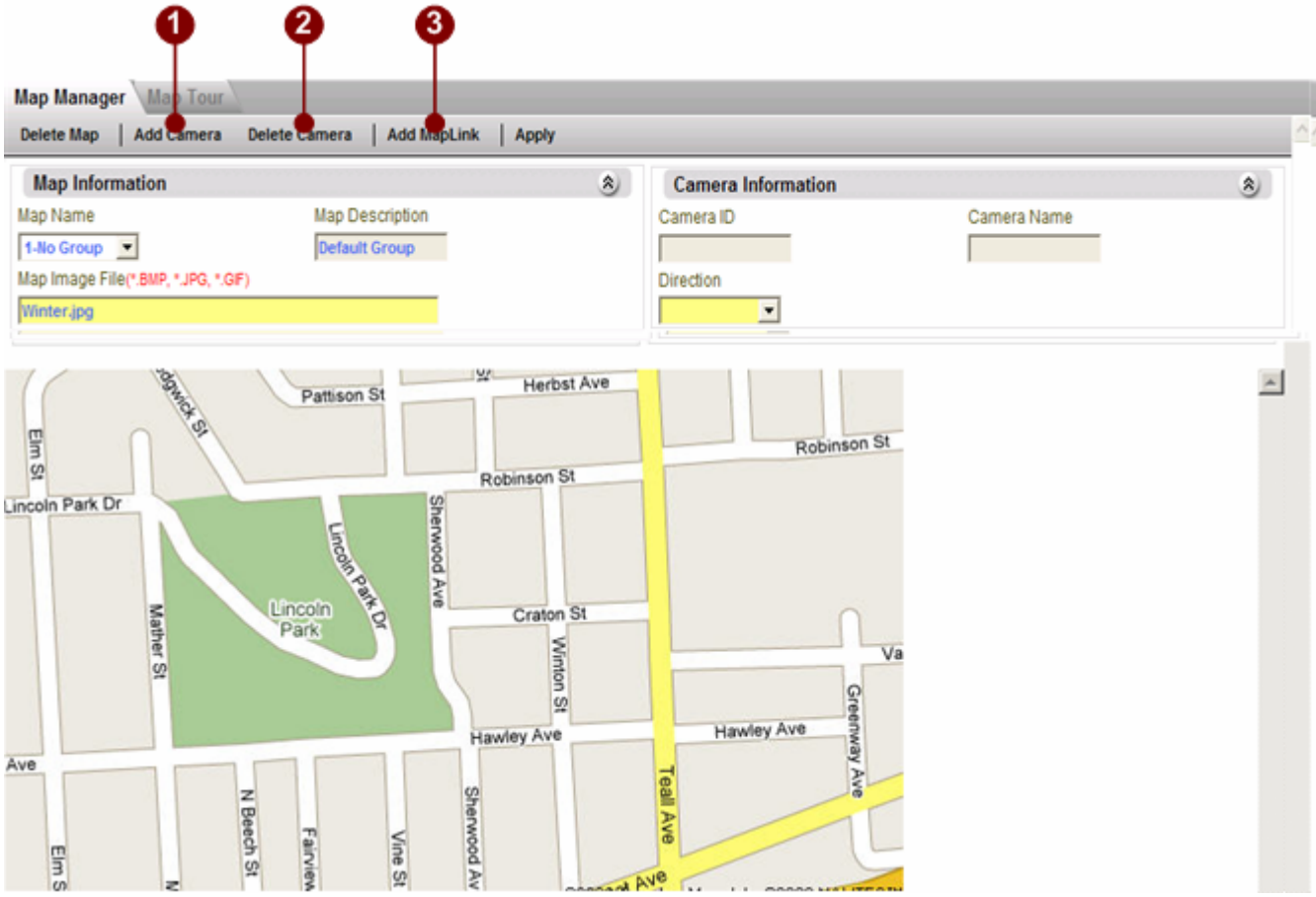


Figure 7-39 Add / Delete Camera, Add Map Link

1. **Add Camera**: Add camera to current map
2. **Delete Camera**: Delete camera from current map
3. **Add MapLink**: Add a map link that links to another map

Add Camera Dialog Box

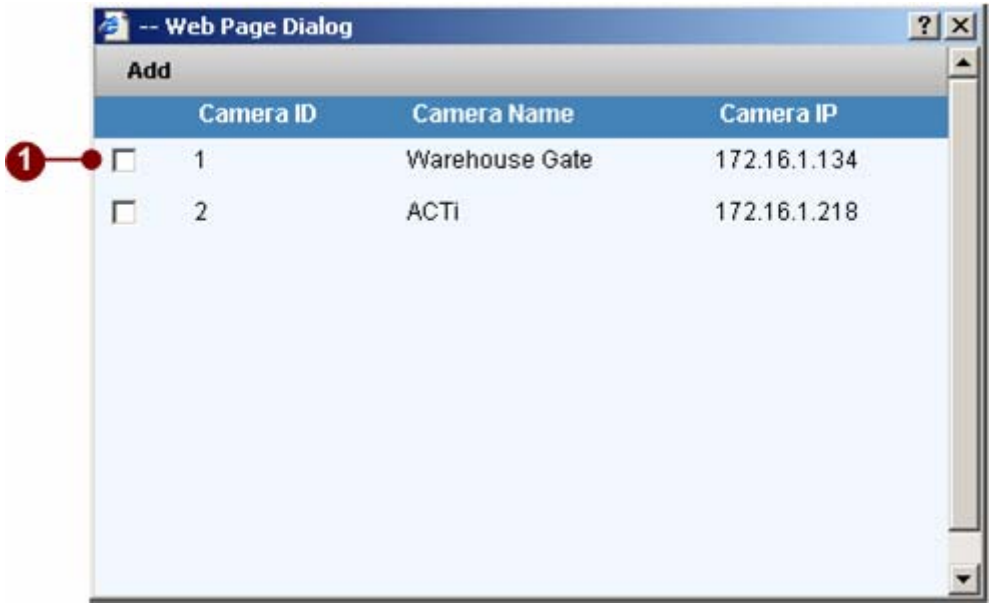


Figure 7-40 Add / Delete Camera Dialog Box

1. **Toggle Selection**: Click to select / de-select the camera into current map

IMPORTANT: This dialog box only displays the cameras that belongs to the same camera group (or map).

Add MapLink Dialog Box

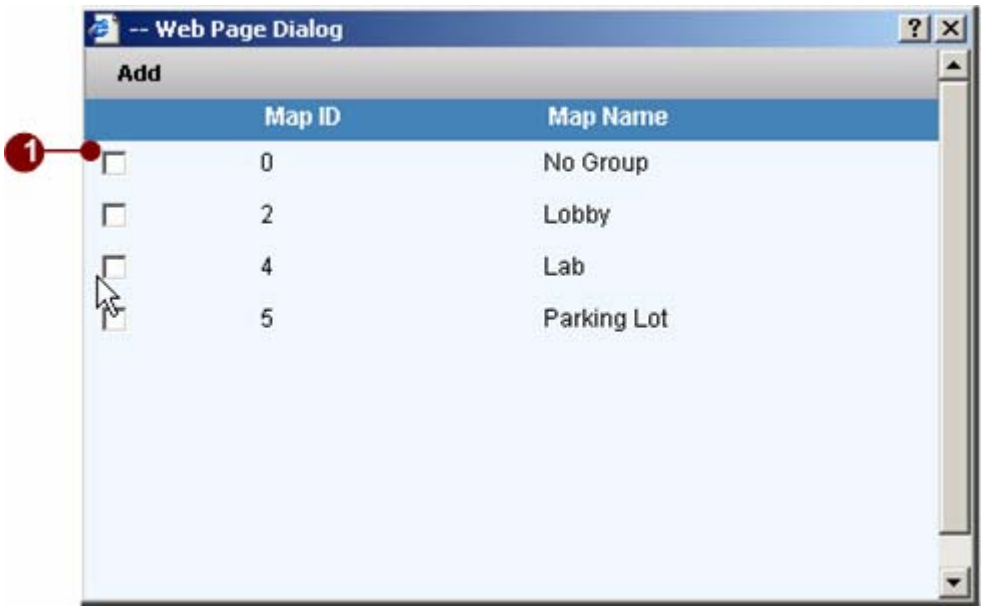


Figure 7-41 Add / Delete Camera Dialog Box

1. **Toggle Selection**: Click to select / de-select the map link into current map.

IMPORTANT: The listing in this dialog box is the listing of valid camera group with map settings already.

Map Management

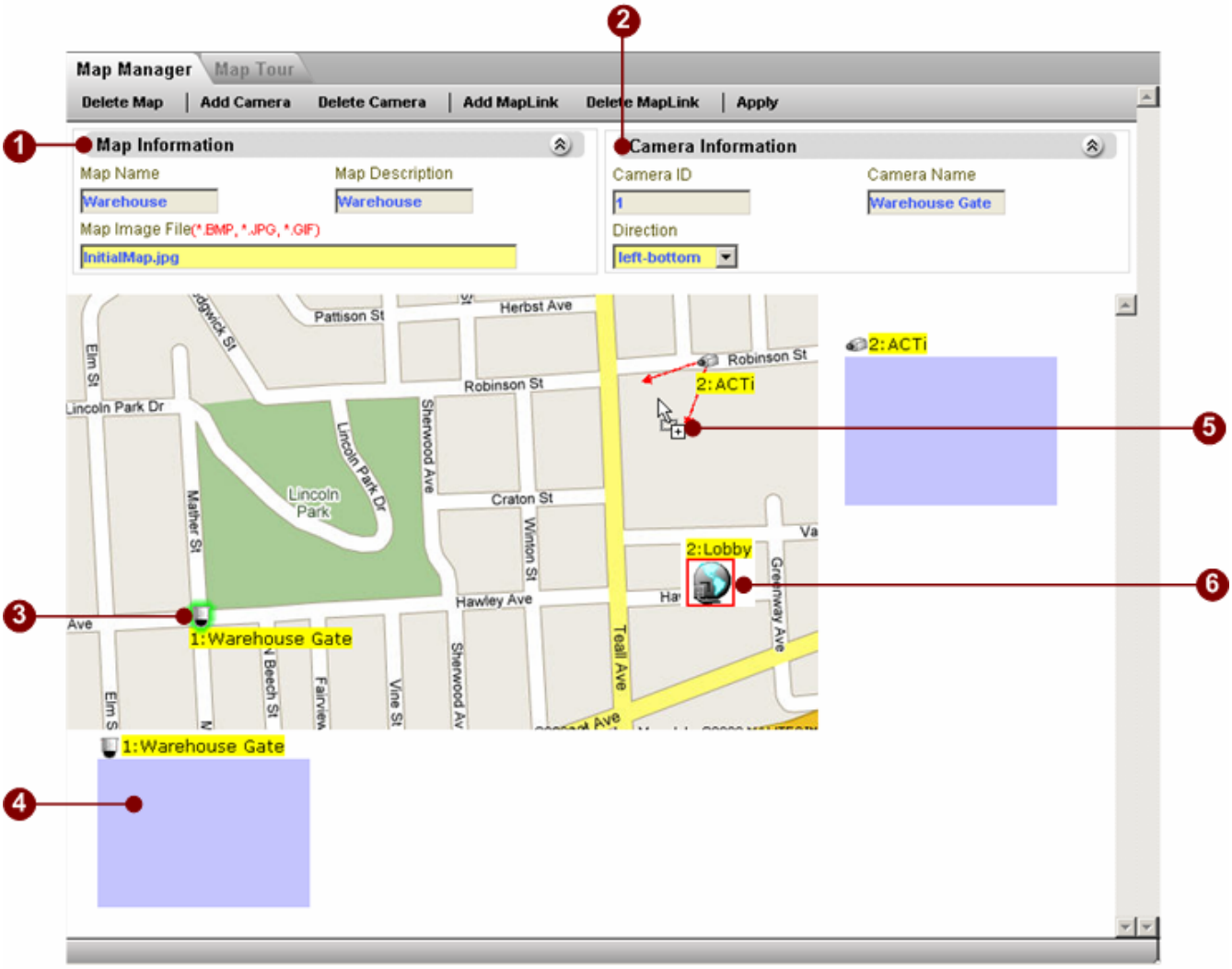


Figure 7-42 Map Management

1. **MAP information Panel**: In this panel user can find

   MAP name: This is based on the name of the camera group.

   MAP description: This is based on the description of the camera group.

   MAP image file: Click the column to select the MAP image user wish to use for this E-map.

2. **Camera Information Panel**: User can find

   Camera ID: The ID of the camera user selected

   Camera Name: The name of the camera user selected

Camera Shooting direction: Click to select the camera shooting direction shown on the E-MAP.

3. **Camera Icon:** Displays the camera icon. User may drag the icon and move to any place of the canvas in the map.
4. **Camera Preview Window**: Drag the camera preview window to any place in the E-map.
5. **Camera Shooting Direction:** User may simply click and drag on the direction icon and move the direction to the correct angle**.**
6. **MapLink icon**: Map link that links to another map, Click the icon links to another map.

NOTE: User can drag and drop to change direction icon, just drag the area near camera icon.

Map Tour

This chapter teaches user how to configure the E-map tour. A E-map tours enable the ACTi NVR to automatically switch between selected E-maps and stay for a programmable time. This can be very powerful for Guards to monitor many E-maps.

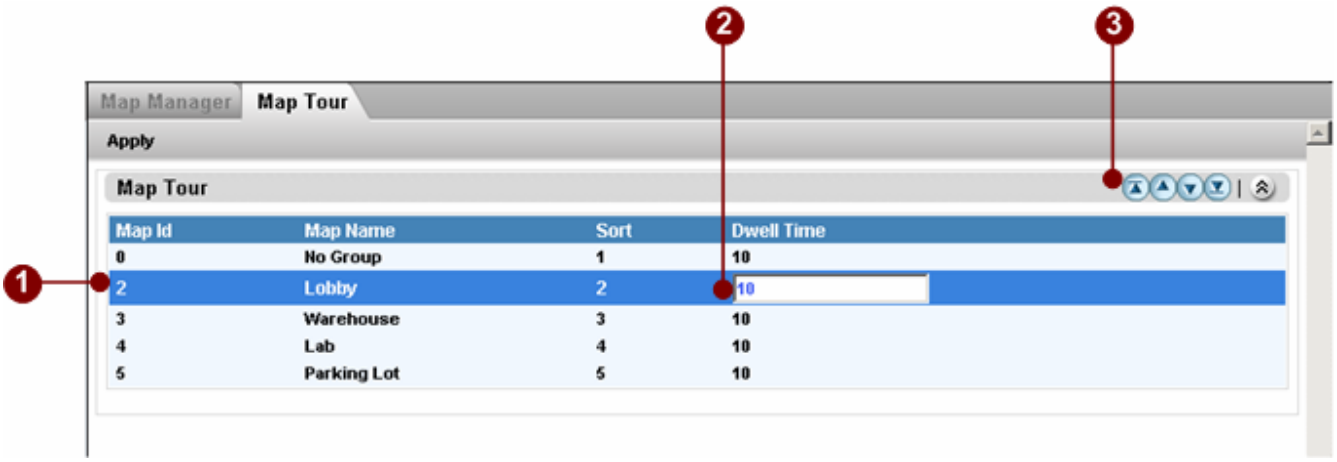


Figure 7-43 Map Tour

1. **E-map List in the MAP tour**: User can see current e-map list to be switched between in a MAP tour.
2. **Dwell Time**: Click to enter the dwell time of each E-map during MAP tour.
3. **Panel control of the E-map sequence**: Use this panel to control the sequence of the MAP tour.
4. **Apply** button: Click the apply button to save the settings.

NOTE: Default Dwell time is 30 seconds. Please don't set this value to one that is smaller than 15 seconds.